RESCUE INTO THE PAST by RALPH MILNE FARLEY

VOLUME 14
NUMBER 10

See BACK COVER

AMAZING STORIES

OCTOBER
20c

Raiders OUT OF Space

By Robt. Moore Williams

THRILLING SCIENCE STORIES BY

ED EARL REPP · JACK WEST · DON WILCOX

AMAZING STORIES

OCTOBER
1940

"Boys, in 1 minute through that door will come our new star salesman–"

JUST when we had got to thinking our sales were doing extra all right, J. P., the sales manager, whammed home the old body punch at the first-of-the-month meeting.

"Boys," he said, "in just one minute, through that door will come our new star salesman . . . and I expect every man to cooperate with him to the fullest."

No kiddin', a pin dropping would have sounded like an exploding bombshell. Jim Smith looked at me, I stared at Ed Johnson. What was going on? Who was this newcomer? What kind of a bird would he be? Who was going to be "fired"? J. P. sure had us in a dither —and I mean dither!

And then, through the door staggered the office boy carrying a tray as big as a cart wheel. On top of it stood twelve big, gleaming bottles of Listerine Antiseptic.

J. P. grabbed the nearest one off the tray and slammed it down on the desk.

"Here he is," he bellowed, "and none of you guys had better laugh, either. For a long time I've noticed that some of you men—and I'm not mentioning any names, all too frequently have a breath that would knock a cow down. It all adds up to this: *If I've noticed it, customers must have noticed it, too.* And that's bound to be bad for business. After coming up against a case of halitosis a couple of times, a customer is entitled to close the door on you—*for keeps.*"

We all stirred uneasily.

"From now on," J. P. continued, "this is an order; take a swig of Listerine Antiseptic every morning before you hit the street. Get that? Not now and then after a big night . . . but *every* morning. Step up, gentlemen, and get your bottle."

Maybe J. P. was right, and maybe it's only coincidence, but I'm doggoned if the sales for the next six months weren't better, in spite of a lot of tricky stuff from our competitors.

How's *Your* Breath?

In business, it's just common sense to take precautions that your breath doesn't offend. Odor seldom gets an order . . . often loses one.

More and more smart salesmen recognize this and start the business day with Listerine. Notable for its antiseptic and deodorant power, Listerine renders the breath sweeter, fresher, purer.

Why not get in the habit of using Listerine Antiseptic yourself? It makes your mouth feel so wonderfully fresh and clean. The moment Listerine enters the oral cavity, it begins to halt the fermentation of tiny food particles which, some authorities say, is the principal cause of bad breath, then overcomes the odors that fermentation causes.

Keep Listerine Antiseptic handy at home and in the office, and tuck a bottle in your bag when you travel. Rinse the mouth with it before every business and social engagement. It really pays! Lambert Pharmacal Co., *St. Louis, Mo.*

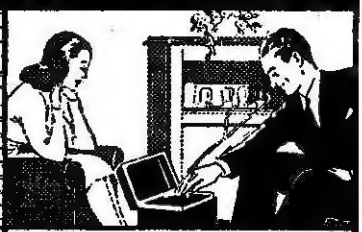
LISTERINE CHECKS HALITOSIS (*Bad Breath*)

I Jumped My Pay from $18 to $50 a Week!

Here's how I did it

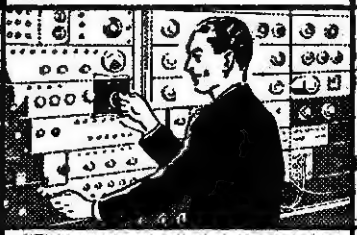
by S. J. E.
(NAME AND ADDRESS SENT UPON REQUEST)

"I had an $18 a week job in a shoe factory. I'd probably be at it today if I hadn't read about the opportunities in Radio and started training at home for them."

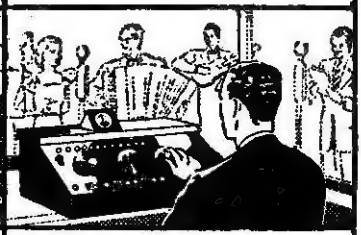


"The training National Radio Institute gave me was so practical I was soon ready to make $5 to $10 a week in spare time servicing Radio sets."

"When I finished training I accepted a job as serviceman with a Radio store. In three weeks I was made service manager at more than twice what I earned in the shoe factory."



"Eight months later N. R. I. Graduate Service Department sent me to Station KWCR as a Radio operator. Now I am Radio Engineer at Station WSUI. I am also connected with Television Station W9XK."



"N. R. I. Training took me out of a low-pay shoe factory job and put me into Radio at good pay. Radio is growing fast."

Find out today how I Train You at Home to BE A RADIO TECHNICIAN

J. E. SMITH, President National Radio Institute Established 25 Years

If you can't see a future in your present job, feel you'll never make much more money, if you're in a seasonal field, subject to lay offs, IT'S TIME NOW to investigate Radio. Trained Radio Technicians make good money, and you don't have to give up your present job or leave home to learn Radio. I train you at home nights in your spare time.

Why Many Radio Technicians Make $30, $40, $50 a Week

Radio broadcasting stations employ engineers, operators, technicians. Radio manufacturers employ testers, inspectors, foremen, servicemen in good-pay jobs. Radio jobbers, dealers, employ installation and servicemen. Many Radio Technicians open their own Radio sales and repair businesses and make $30, $40, $50 a week. Others hold their regular jobs and make $5 to $10 a week fixing Radios in spare time. Automobile, Police, Aviation, Commercial Radio; Loudspeaker Systems, Electronic Devices are other fields offering opportunities for which N. R. I. gives the required knowledge of Radio. Television promises to open many good jobs soon.

Many Make $5 to $10 a Week Extra in Spare Time While Learning

The day you enroll, I start sending you Extra Money Job Sheets which start showing you how to do Radio repair jobs. Throughout your Course I send plans and directions which have helped many make $5 to $10 a week extra in spare time while learning. I send special Radio equipment to conduct experiments and build circuits. This 50-50 training method makes learning at home interesting, fascinating, practical. I ALSO GIVE YOU A MODERN, PROFESSIONAL ALL-WAVE, ALL-PURPOSE SET SERVICING INSTRUMENT to help you make money fixing Radios while learning and equip you for full time work after you graduate.

Find Out What Radio and Television Offers You

Act Today! Mail the coupon for my 64-page book, "Rich Rewards in Radio." It points out Radio's spare time and full time opportunities and those coming in Television; tells about my Course in Radio and Television; shows more than 100 letters from men I have trained, telling what they are doing and earning. Read my money back agreement. MAIL COUPON in an envelope or paste on a penny postcard—NOW!

J. E. SMITH, President,
Dept. OJM, National Radio Institute,
Washington, D. C.

MAIL NOW · Get 64 page book FREE

J. E. SMITH, President, Dept. OJM,
National Radio Institute, Washington, D. C.

Mail me FREE, without obligation, your 64-page book, "Rich Rewards in Radio." (No salesman will call. Write plainly.)

Age.....

Name .....

Address .....

City ..... State.....

Your credit is OK

I'm going to send you your choice of these selected FEATURES

SEND ME $1

and I'll send your choice of these selected VALUES for 10 DAY TRIAL and 10 MONTHS TO PAY. Money back if not Satisfied . . .

Yes — your credit is OK with me — I'LL TRUST YOU. Tell me what you want—put a dollar bill in an envelope with your name, address, occupation and a few other facts about yourself—I'll send your choice of these select values for your approval and 10 day trial. If you are not satisfied that you have received good, honest dollar for dollar value, send it back and I'll promptly return your dollar. If satisfied, you'll pay in 10 small monthly amounts you'll never miss.

Jim Feeney
Sales Mgr.

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A Postcard brings my complete 48-Page Catalog showing hundreds of diamonds, watches, jewelry and silverware, all offered on my 10-Months-to-Pay Plan.

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BULOVA'S $33.75
Miss America
R251—Newest Bulova feature; 17 jewels; tiny 10K yellow gold filled case. Gorgeous creation priced low; Complete in gift box.
$3.28 a month

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KENT WATCHES $15.95
P288—Ladies' Kent Heart Watch with bracelet to match. K152—Man's Kent round watch with sweep-second hand. Both 7 jewels; 10K yellow rolled gold plate cases. $1.50 a month

BRIDAL SET $29.75
ABT/C81—3 diamond Engagement Ring; 7 diamond Wedding Ring; both 14K yellow gold.
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BENRUS Signet $19.75
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M222—Bulova's newest feature for men—a 17 jewel watch with 10K yellow rolled gold plate case. A new 1940 feature.
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L.W. Sweet

MAIL ORDER DIVISION OF FINLAY STRAUS, Inc.
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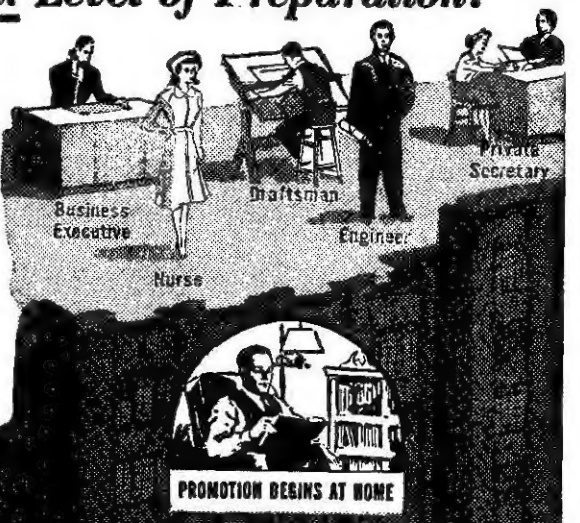
What Is Your Present Level of Preparation?

The FIRST proof of personal ability is your capacity to see the *need* for training and to GET IT. The man or woman who doesn't *realize* that education is VITAL to success—or who says he or she "doesn't have time," "hasn't the money" or that study is "too hard"—simply lacks one of the *fundamentals* of the ABILITY to make good. *American School (Chicago) graduates* by the thousands have PROVED that anyone who WANTS an essential education CAN HAVE it. *You can, too!*

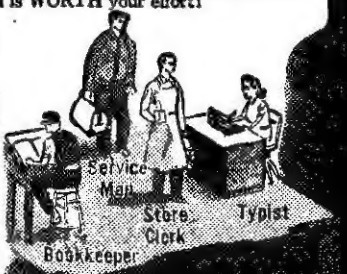
You Are Only HALF a Man Until Training Rounds Out Your Ability and Experience

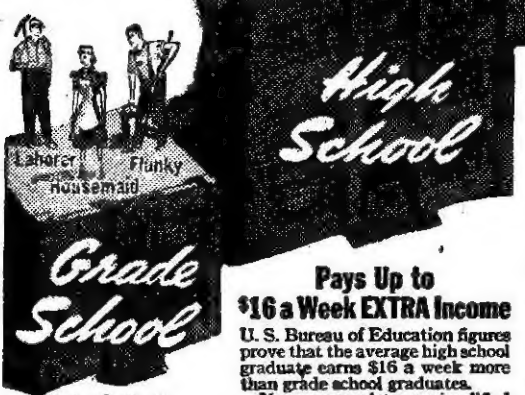
To make your natural ABILITY pay you *profits*, and to get jobs that give you the *kind* of EXPERIENCE that promotes constant progress, you practically MUST back that *ability* with TRAINING . . . combine *experience* with EDUCATION. Using only a PART of your SPARE time, you can train AT HOME for the good position you want. If it is WORTH having, it DEMANDS training and is WORTH your effort!



Write for Facts No Obligation

Make up your mind to enjoy the GOOD things in life. Have FAITH in yourself, in your country and in your future. *Expect* Success and *get ready for it.* Write for FREE Bulletin TODAY. (See coupon.)





Gets Only the "Leavings"

With only grade school education, you are virtually CONDEMNED to the low pay, menial jobs that others DON'T WANT . . . because THEY are trained for better things. Home study can fit YOU too for more desirable, better paid positions.

Pays Up to $16 a Week EXTRA Income

U. S. Bureau of Education figures prove that the average high school graduate earns $16 a week more than grade school graduates.

You can complete our simplified High School Course in SPARE time at home, as FAST as time and ability permit. MANY FINISH IN 2 YEARS. Equivalent to resident school work—prepares for college, pre-professional examinations, business, industry. Standard texts. Diploma. Or if you've had some high school, FINISH now. Credit for subjects already completed. Single subjects if desired. Low tuition, easy terms. American School, Chicago, est. 1897—endorsed by educators.

Pays Up to $25 a Week EXTRA!

Government figures show that graduates of specialized training of college grade average $25 a week more than high school graduates, $41 more than grade school graduates. But whether you failed to finish college—or failed to complete high school—home study CAN HELP YOU. Basic high school subjects are included in vocational courses listed below.

More than 150 noted educators, engineers and executives helped prepare American School courses. An *Advisory Board* of 20 outstanding authorities—each an active leader in his field—is consulted when our work is prepared or changed. A Staff of competent instructors—home study *specialists*—works closely with the individual student. Why continue in an underpaid, overworked job—subject to periodic layoffs? *Step up where you belong*, into well-paid, pleasant work where you command the admiration and respect of others. For full details, mail coupon RIGHT NOW!

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Gentlemen: Please send me FREE information covering special training in subjects checked below. No obligation on my part.

☐ High School Course

☐ Accounting and Auditing	☐ Drafting and Design
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Name.....

Address.....

Spare Time Training Can Help You in Your Work—and Socially

OCTOBER
1940

AMAZING STORIES

TRADE MARK REGISTERED

VOLUME 14
NUMBER 10

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Front cover painting by Leo Morey depicting a scene from **Raiders Out Of Space**
Back cover painting by Frank R. Paul depicting **Life On Ganymede**

Illustrations by Julian S. Krupa, Robert Fuqua, H. R. Hammond, Dan Heilman, Joe Sewell

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AMAZING STORIES OCTOBER 1940

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Volume XIV
Number 10

The OBSERVATORY by THE Editor

TIME travel has always been one of the favorite themes of science fiction writers, and recently our readers have demanded more of this type of story. We've complied with stories like "When The Gods Make War," "Murder In The Time World," and others.

Now, in this issue, we present another time story by the one man who has written more time travel yarns than the whole field combined, Ralph Milne Farley. And as usual, it has that peculiar charm, and that amazing factor of incontestability that always highlights his work.

In a future issue we will present, due to reader demand, a sequel to A. R. Steber's popular first place story in our July issue, continuing the adventures of the future Charlie McCarthy.

ONCE in a great while a writer sits down and does a yarn that he doesn't intend to sell, but which turns out to be a rare piece of science fiction, packed with real significance. An editor, in this case ourselves, decides it is what he has been looking for to break the monotony. Thus, in this issue you will find the most unusual story Don Wilcox has written to date. It is "The Voyage That Lasted 600 Years," and we believe it to be the most significant piece we've had in months.

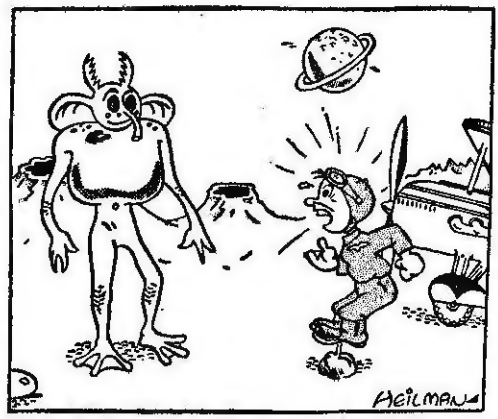
REMEMBER "The Prince Of Liars," by L. Taylor Hansen? Old-timers surely will leap to their feet and exclaim "yes!" That was Hansen's last story to be published, and we've tried for years to get him to do another. At last we've succeeded. So in the near future you will read "Lords Of The Underworld" by one of the most exciting of the old masters of science fiction and AMAZING STORIES' youth. It's a fine story with real science and the drama of high adventure.

ADD new inventions (science behind the daily scenes in industry):

Invisible glass, a recent discovery. It is made by the technique of depositing single layers of molecules on a glass or metal surface. This does away with reflections, and the glass becomes "invisible."

A camera that will make pictures at the rate of 120,000 per second. Wow, is that fast! But it isn't a camera you can carry around—it carries you! You stand inside, and operate it. Film is arranged cylindrically about the 1000 holes that represent the lenses (no glass lenses), each 0.01 inch in diameter. The film is 4½ by 40 inches. A ½ horsepower motor is used to operate this "blitzkrieg" camera. Each of the pictures, 1000 in number, is 9 mm. square.

A tiny Alnico permanent magnet, having a steel sheath, lifts 1,500 times its own weight.



"Omigosh, I've pulled a 'Corrigan!' This ain't Newark!"

SPEAKING of inventions, your editor and author of this column has been putting out this issue with one hand, his left. But he will soon be back in action with both hands because of medical science, which restored a badly damaged arm to full use after an auto accident. We never hear of these new methods of surgery until it happens to us, apparently, but we are grateful for inventive doctors.

NOW it's Russia! As we wrote this column, news came of aerial tank warfare. Giant Russ planes land tanks which capture a city. The more we read about this war, the more we feel that we are reading a science fiction story. In-

(Concluded on page 33)

AMERICA *must*

IT HAS BECOME increasingly clear to those who have eyes with which to see, that America is facing the gravest emergency in her history. It is also clear that the steps now being taken to prepare our country against this emergency are shockingly inadequate.

WE FACE A combination of powerful enemies in both Europe and Asia, who control between them military establishments of the most fantastic proportions ever contemplated in this world. Hungry and predatory, they are ruled by an acknowledged dream of world conquest. Their hatred and contempt for us and our system of life is implacable and unbounded. Also, the greatest booty in the world is to be found here in the rich and unprotected United States.

AMERICANS HAVE only one course to pursue; they must organize immediately with every resource in their power to meet the shattering attack soon to be made on them, or, by being strong, avert it. The half-way measures now employed and contemplated are far from sufficient. Unless we are to suffer the fate of France and China, we must immediately organize to take summary action against the traitors within our gates, and must arm to the teeth to discourage attack from abroad. We should demand universal military conscription. We should take over immediately all the islands in the Caribbean which may have a bearing on our national defense. We should do these things now.

LET US NOT be entangled in glib catch-phrases which belong to a dead era, or be lulled into insecurity by the agents of foreign powers in whose interest it is to keep America helpless and weak. Modern war is swift and complete. It can only be fought with trained men and machines, not hoarded dollars or beautifully expressed social definitions. Its onslaught can no more be resisted by antiquated weapons than the bows and arrows of the Indians could stop the coming of the white man. Smug talk of our industrial greatness as indicating a capacity to turn out the sinews of modern war within a matter of weeks or months, so as to be able to repel a determined invader, is so much mischievous nonsense. Read the speech of our American Chief of Staff, General

prepare NOW!

George Marshall, to the Senate on April 30th. He states that "we have not manufactured a big gun for many years," and that it would take two and a half years to manufacture an ordinary 16-inch gun and carriage. To revamp our industrial establishment to turn out anti-aircraft and anti-tank guns, as well as a formidable air and tank corps, will take a period of years, even under the best organization. Neither can an adequate military and naval reserve be established over-night. Modern war demands expert organization and intensive training of men.

ALL OF THIS must be taken out of the hands of the politicians and placed in the custody of competent men who should be given full authority to act swiftly and energetically. If we do not immediately take every step in such a preparation program with vigor and iron will, our rich nation is inviting attack and despoliation.

SUCH A COURSE will demand a certain amount of sacrifice from all. It will involve huge expenditures, which will have to be paid for by the American people in the form of extra taxes; it may involve a violation of our present wage and hour definitions. It represents a profound change in our way of life and in our thinking; but it is urgently required if we are to save our institutions from ruin.

THE WRECKAGE OF France and China and the imminent disaster threatening Britain are living examples of the folly of any other course than that of complete armed preparedness.

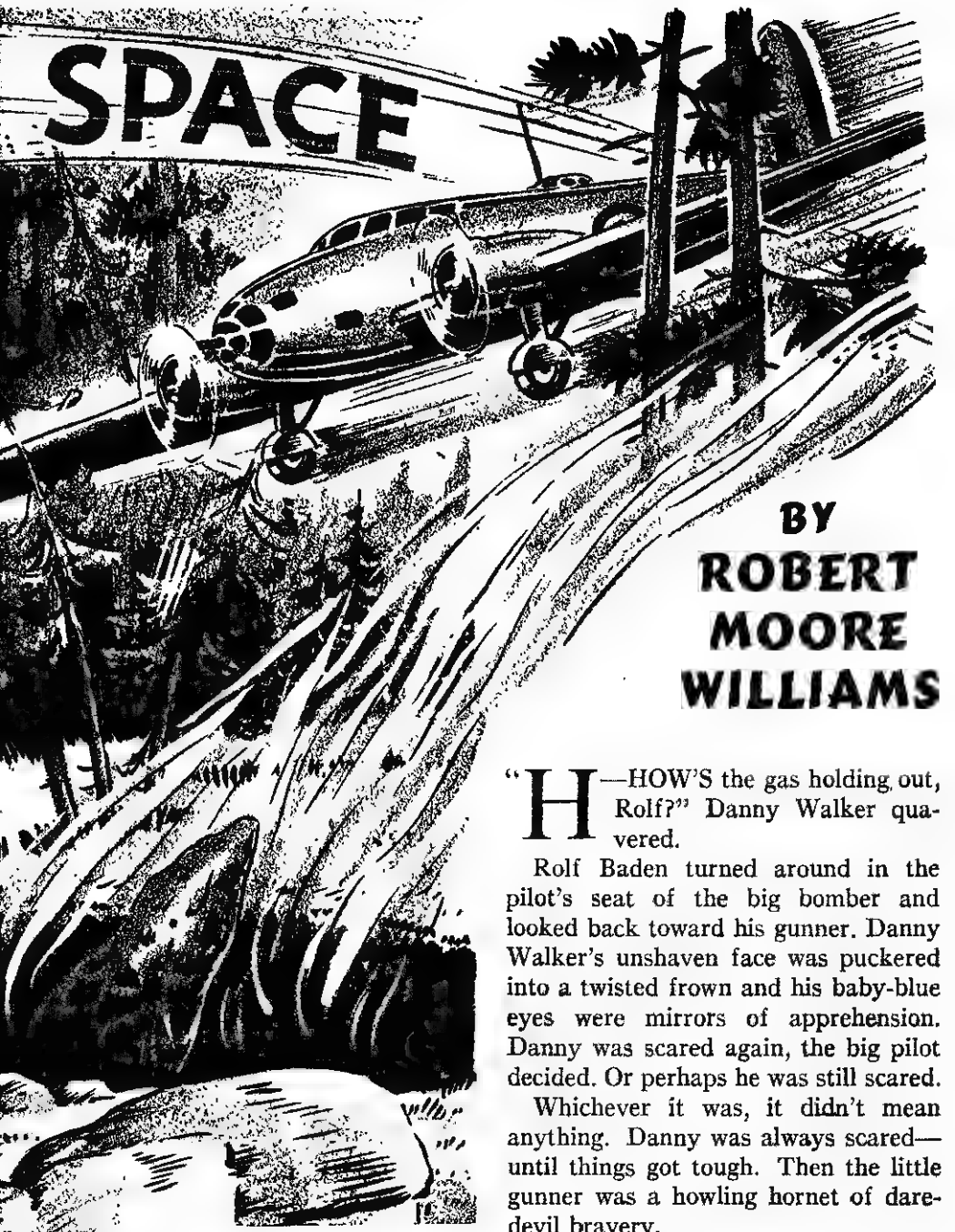
LET US NOT wait until we are attacked. We must act fully and competently now, while there is yet time. Impress this on the minds of all public officials as being the will of the nation, and it will be done . . . Write, wire or phone your congressman or senators.

WILLIAM B. ZIFF

William B. Ziff

Publisher

The bomber brushed several small pines dangerously as it dropped into the narrow clearing



BY
ROBERT
MOORE
WILLIAMS

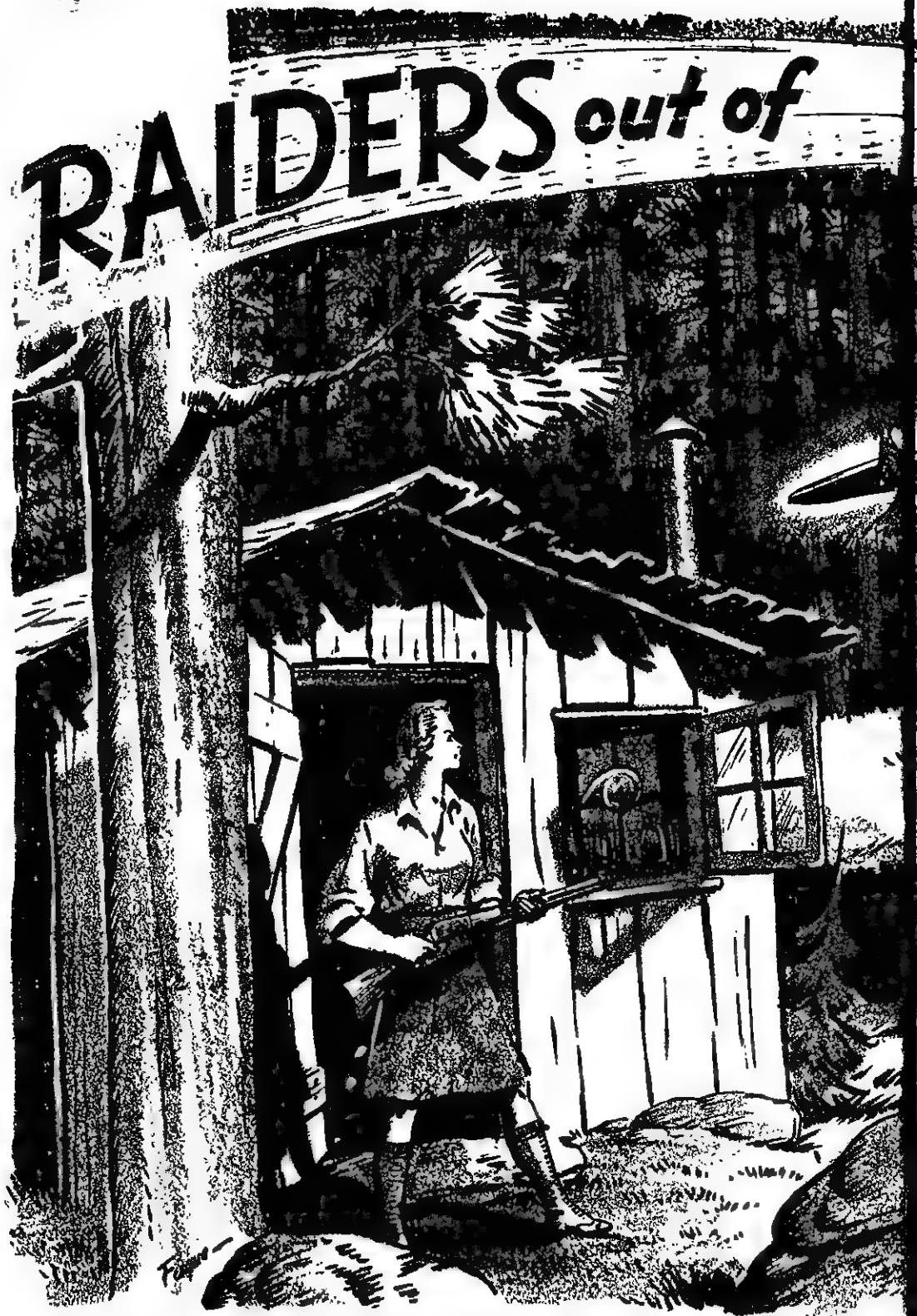
"H—HOW'S the gas holding out, Rolf?" Danny Walker quavered.

Rolf Baden turned around in the pilot's seat of the big bomber and looked back toward his gunner. Danny Walker's unshaven face was puckered into a twisted frown and his baby-blue eyes were mirrors of apprehension. Danny was scared again, the big pilot decided. Or perhaps he was still scared.

Whichever it was, it didn't mean anything. Danny was always scared—until things got tough. Then the little gunner was a howling hornet of daredevil bravery.

DEFEATED France was too hot, so Rolf Baden and Danny Walker lit out, bomber and all—on a flight that led into outer space!

RAIDERS out of SPACE



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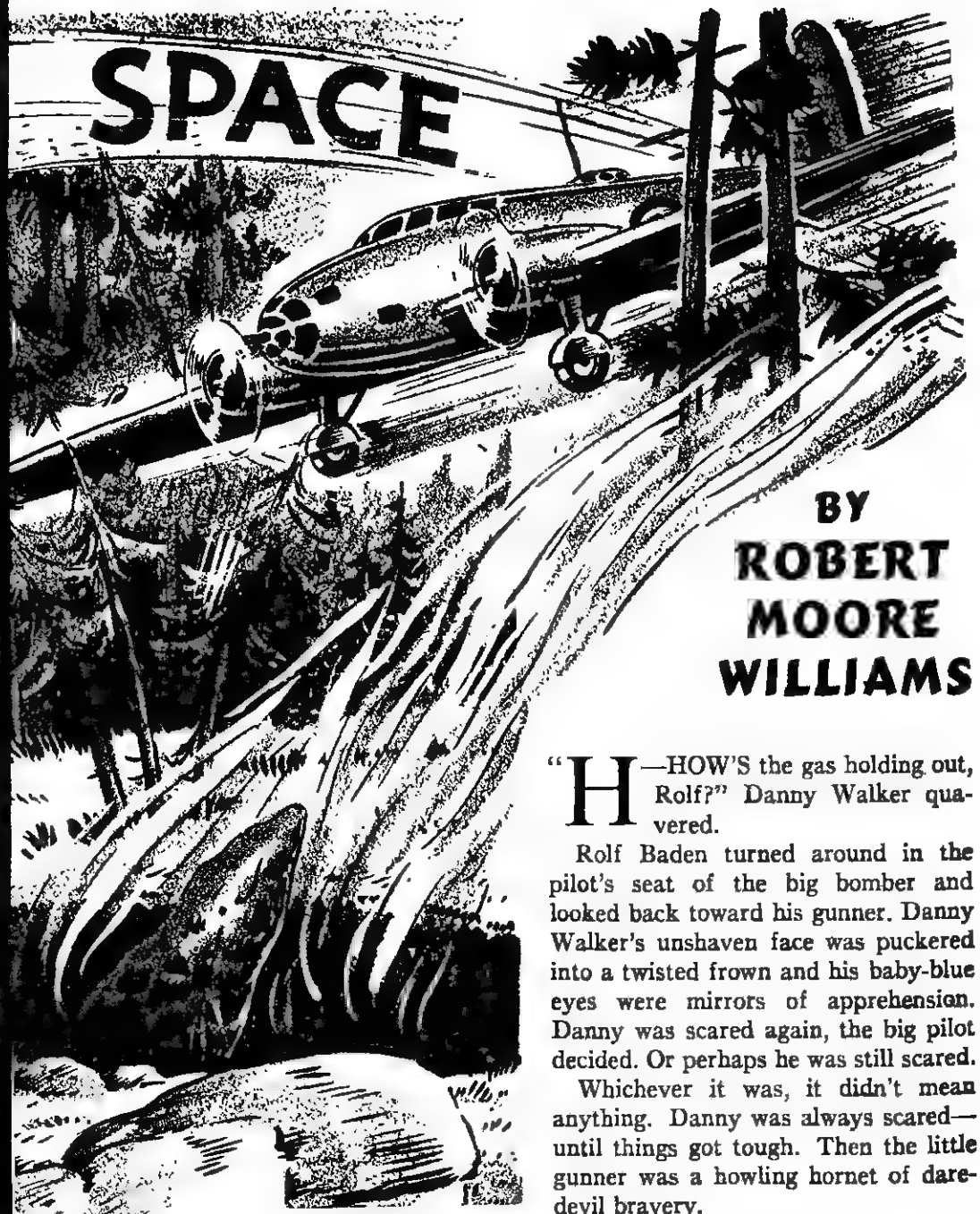

BY ROBERT MOORE WILLIAMS

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DEFEATED France was too hot, so Rolf Baden and Danny Walker lit out, bomber and all—on a flight that led into outer space!

"Never mind about the gas," Rolf Baden grinned. "We got plenty of juice. You keep your eyes peeled for land. We ought to sight the coast of Maine pretty soon now, unless the wind has shoved us too badly off our course."

The big pilot turned to the front again. His eyes swept the instrument panel, lingering for a fraction of a second longer than was necessary on the gas gauge. The little red needle had been as far to the right as it would go when they started. Now it was almost pressing the pin that stopped its motion—*to the left.*

"Maybe enough gas for thirty minutes," Rolf Baden thought. "Maybe enough for twenty minutes. Where in hell is the continent of North America?"

Aloud he said nothing. There was no need in alarming Danny.

"I don't see anything but ocean," Danny spoke up, lifting his voice over the drone of the motors. "It seems to me like we've crossed a million miles of ocean since we left France. I never did see so much water in all my life."

"You crossed it on the way over," Baden reminded him.

"Yeah, but I was in the stokehole and I didn't see much of it. Rolf, you suppose the Nazis will be mad if they ever learn we swiped one of the planes *they* were planning to swipe, and flew it home before they could get their hands on it? Do you think that'll make 'em mad, huh?"

"What the hell do we care if they do get mad?" Baden answered. "Anyhow, they'll never miss one plane more or less."

When the French army had collapsed in June of 1940, the many American volunteers fighting in its ranks had faced the prospect of internment. Rolf Baden and Danny Walker had been among the first volunteers to go over, fighting until the war ended in the French defeat. It had not been their first war. They had seen action in Spain; and before that, in China.

But it might easily have been their last—at least for a long time—if they had stuck around and waited for the Nazi occupation. The point was, they hadn't stuck. France was finished, done, off the face of the map. There was nothing two men could do against an invading army. So, since they were in the air service, they did the only possible thing—removed the bombs from one of the big American-made bombers, loaded the plane with gas, and hopped off—for America. For home.

All they had to do was cross the ocean.

"'Wrong-Way' Corrigan did it," Rolf Baden had said. "Why in hell can't we? It's better than waiting around here and getting stuck in some stinking jail for the next five years."

It was Baden who made the decision to fly home. Danny, as a faithful satellite revolving in a fixed orbit around the big pilot, had merely stuttered,

"W-what are we waiting for? C-crank her up, Rolf, and l-let's burn the wind home."

THE great plane droned on through the afternoon. The needle of the gasoline gauge moved steadily toward the left. The furrows on Rolf Baden's cheeks grew deeper each time the red needle quivered. He kept staring westward, watching for land to come drifting up out of the sea.

But no land came.

"I've been thinking," Danny said suddenly. "What are we going to do when we get home? We haven't got more'n enough dough to buy a couple of steins of beer."

"We'll manage," Baden answered. Silently, he thought, "First, *get* home."

"Look," said Danny. "Look, Rolf; I've been thinking. How about us getting ourselves a couple of jobs and settling down somewhere? Maybe we could hook up with some big air transport company, you as a pilot and me as a mechanic. How about it, Rolf, huh?"

"Well—" said Baden.

"No, sir," Danny interrupted.

"I haven't said anything yet," Baden protested.

"No, but you were going to. You were going to say there is still a war in China, and since we're out of a job, how about us taking another whirl for the laundrymen? Was that what you were going to say, huh?"

The pilot turned in his seat and grinned at his diminutive gunner.

"I hadn't thought of such a thing," he denied.

"You're a liar if ever I saw one, Rolf Baden! And it's no go," Danny said fiercely. "I've had enough fighting to last me a lifetime. I'm going to settle down. Me and you, we're going to settle down. And we're going to get ourselves some jobs where we'll never even hear a nasty word. Do you understand me, you big lug? We're not going to get in any more fights! Not ever!"

There was a passionate wail in Danny Walker's voice.

"You talked like that when we came out of Spain," Baden reminded.

"Yeah, but this time I mean it. You can pick the jobs for us—anything suits me—but I'm going to have it specified in the contract: *no fighting!*"

"Okay, Danny," the big pilot answered, taking another glance at the gas gauge. "I give in. No more fighting, except in self-defense."

The right motor coughed and spat blue smoke, and for an instant Baden's heart was up in his mouth. The plane quivered, but then the motor again took up its throbbing drone.

"Land, ho!" Danny Walker called. "I see it. Looks like mountains. Land, ho!"

"Where?" Rolf Baden fiercely demanded.

"Over yonder," Danny answered, pointing. Off to the westward a dim blue mass was vaguely visible.

No trace of emotion showed on the face of the big pilot.

"Ten minutes," he thought. "Just ten minutes more, and we'll be there." The lines etched around the corners of his eyes began to smooth out.

The plane droned smoothly on. Ten minutes later they were over a rocky coast line.

"It's Maine, all right," Baden said. "Mountains and forests all over the place. Where, oh where are we going to put this bus down?"

"Go on inland," Danny Walker suggested. "There's bound to be some place where we can set down."

"You hope."

Both motors gulped simultaneously. They sputtered, sucked the last drops of gas, and died.

"Now we're in for it," Danny groaned.

"Yep. Gotta set her down."

BADEN'S eyes were already searching for an open space large enough to land the big ship. Off to the right he saw a cleared field, with a large ramshackle building located near it. He pushed the nose of the plane down.

"That's a damned small field!" Danny shouted.

"I know it," Baden answered. "But it's the best we can do. We can't be choosy about where we're going to land. Hold on tight, Danny!" he yelled.

Baden had already lowered the re-

tractable landing gear. Now he squinted fiercely over the nose of the plane, watching the line of trees at the edge of the field. He had to brush the undercarriage on the tops of those trees, then set the ship down and hope she wouldn't overrun the field and bury her nose in the line of trees on the other side.

The wind around the wings was a whistling whine. The ground was coming up, up, *up!* The trees looked like a line of lances reaching up to impale the bomber. Then the branches rattled against the undercarriage, against the wings, popping and snapping.

Baden held his breath. Was he too low? Were the trees going to flip them over? The ship slid over. They were past the trees! But the nose was dropping too fast. They were losing flying speed.

He pushed the nose down farther, and jerked it up. The wheels thudded into the ground, and the ship jumped like a frightened bird trying to take wing. Baden shoved her down. The wheels caught again. They were rolling. They were on the ground, racing across the field. The line of trees on the other side was looming closer every second. He fought the brakes. The ship slowed. It came to a halt not ten feet from the trees.

"G-g-golly!" Danny quavered. "Golly!"

The gunner yanked open the door. He didn't try to step out of the plane. He fell out, deliberately. When Baden stuck his face out of the ship, the gunner was hugging the ground.

"Dirt!" Danny gasped. "Look at it, Rolf! Good honest dirt! It looks so good to me I could almost eat it."

Baden grinned. He stepped out of the plane, and rather abruptly sat down. Until that moment he had not known how much that mad ocean flight had taken out of him, both physically and mentally. Every muscle in his body ached. His mind was a dull, dead, continuous throb. But the important thing was—they were home. They were safe—

"Get out of here!" a voice said. "You two men are trespassing, and I want you to get out of here this minute."

Baden blinked. The voice seemed to be coming from the ground. Then he saw something he had not noticed before. The plane had stopped right beside a hole somebody had dug in the ground. It was a large hole, and dirt from it was scattered everywhere. Oddly, he wondered why anyone would dig a hole here at the edge of the field. Then he saw the speaker, and his wonder grew.

The speaker was a girl, an unusually attractive girl. She was climbing out of the hole. She had a shovel in her hand, but she promptly dropped the shovel, reached down into the hole and picked up a rifle!

"Get right back in that plane and get out of here!" she vigorously demanded, pointing the rifle at them.

"Lady—" Rolf Baden began mildly.

"I'm going to count to ten," she snapped. "If you're not gone by then, I'm going to start shooting."

ROLF BADEN stared at her in stupefied amazement. He was used to guns and girls, but not in combination. From the way this girl handled the rifle, he knew she knew how to use it, and her red hair told him she probably *would* use it. Looking at her, he saw she was badly frightened, scared, but the odd thing was that she did not seem to be scared of the transoceanic newcomers.

"Lady," Baden said, "you've got us wrong. We didn't drop in to take an uninvited hand in your private treasure

hunt," he nodded toward the hole, "but because we couldn't help ourselves."

"One," she answered grimly.

"Put down that gun, girl. You're making a mistake."

"Two."

"I tell you we couldn't move the plane if we had to. We're out of gas. This was a forced landing," Baden protested.

"Do you think we'd pick a place like this to set down if we had any choice?" Danny queried.

"Three."

"G-gosh!" the gunner quavered. "She means to shoot, Rolf! We better make tracks out of here."

"Four."

Danny got to his feet.

"Sit down!" his companion commanded. "This is the Maine wilderness. There's probably not another house within forty miles."

"But she'll shoot us! She's not fooling!"

"Then let her shoot."

"Five," the girl chanted.

Rolf Baden looked at her. He dug a cigarette out of his pocket, lighted it.

"Lady," he drawled, "after you've shot us, I suggest you look at our identification papers. You'll find we're exmembers of the French air force. Then take a look at the markings on this plane. You'll find it's an American-made French bomber. Then you can spend the rest of your life explaining to yourself how you happened to shoot a couple of strangers who accidentally dropped in on you."

The shot went home. For the first time, doubt showed on the girl's face. But she did not lower the muzzle of the rifle.

"Are you telling the truth?" she demanded.

"No," Baden drawled. "With a rifle looking us in the eye, we're thinking up fairy stories. Here, take a look at this." He flung his little packet of identification papers at her.

A struggle showed on her face. Finally, but without lowering the rifle, she bent over and picked up the papers. Then she made Danny show his papers. Then she examined the markings on the plane.

"All right," she said in a hollow voice. "You're right when you said it was forty miles to the nearest house. It's farther than that. You can stay here until tomorrow. Then you'll have to be on your way. Come on. I'll take you to the house." And she motioned for them to follow her.

"What's going on here?" Danny quavered, as they got to their feet.

Rolf Baden didn't answer. He had moved casually nearer the hole the girl had dug in the ground. Instantly her rifle came up.

"Stay away from that hole!" she snapped. "If you want to stay alive."

CHAPTER II

The Sphere

"I—I don't like this, Rolf," Danny Walker wailed. "I don't like it a l-little bit."

The two men were seated in a large bedroom on the second floor of the house to which the girl had taken them. Bathed, shaved and full of good food, they were vastly improved in appearance. Outside the shadows were lengthening as the afternoon began to move into night.

The girl had told them her name—Jean Chapman. Somewhere that name had struck a responsive chord in Rolf Baden's mind. He had seen or heard it before but he couldn't remember where.

From the plane, she had taken them

straight to the house, where a fat but somehow rather frightened Negro cook had prepared food for them. They had seen no one else. After they had finished eating, the girl had taken them to their room.

"You may remain tonight, if you will promise not to leave this room," she had said. "You must leave tomorrow."

"Why must we stay in this room tonight, Miss Chapman?" Baden questioned.

"Because I request it."

"And if we don't choose to do so?"

"Then you can leave now," she had flared. "One of the conditions on which I am accommodating you, is that you stay where I put you. If you don't choose to do as I say, you can start walking."

"We'll stay," Rolf Baden had grimly answered, "where you put us."

"See that you do," she had answered. With that, she had left them alone.

"I still don't like it," Danny Walker muttered, gesturing toward the window. "Take a look at that building out there, Rolf. You might think it's a barn, but it isn't. Too big for that, doors too large. And it's not a factory, in spite of the fact that it seems to be full of machinery. Nobody would build a factory 'way out here in this godforsaken corner of the wilderness. So what is it, huh?"

Baden had already been looking at the building. As Danny had said, it was full of machinery. Sprawling over a couple of acres, it obviously wasn't a barn.

"It looks like a laboratory of some kind," Baden mused.

"Laboratory? Who would build a lab way up here?"

The pilot shrugged. "I don't know *who* built it. From the way it looks, it hasn't been used for several years, anyhow. But I can easily guess *why* it was built where it is."

"Why?" Danny challenged.

"Because somebody wanted to work in private," Baden answered. "So he came up here, where the nearest neighbor is miles away, and built himself a laboratory."

Danny Walker was silent, turning over in his mind various reasons why anybody would come so far into the wilderness to build a laboratory. They were in a corner room, with windows on two sides, and Baden walked across to the other windows and glanced down toward the field where they had landed their plane. He stiffened.

Danny, coming up and looking over his shoulder, said,

"She's back at that hole again, working like she was trying to dig up the devil himself. What do you suppose she's got buried there, Rolf, huh?"

"Just another question that we can't answer," the big pilot mused.

"Do you suppose we ought to go down and offer to help her?" Danny questioned. "Sort of pay for our room and board that way. Digging a hole is no work for a woman."

"From the way she poked that rifle up out of that hole when we landed, I would say she didn't want any help," Baden answered.

He moved away from the window, lit a cigarette and stretched himself on the bed. The girl was up to something, but whatever it was, she had unmistakably indicated that she considered it her business. And Baden was tired. Ocean hops drain the strength out of a man. Before he knew it, he was asleep.

THE crash of a rifle awakened him. He sat up and stared around the room, trying to remember what had happened. Danny was lying beside him. The gunner's snore broke off in

the middle of a wheeze, and he gasped.

"What is it, a bombing raid? Are the Nazis coming over again?"

Baden was off the bed and over to the window in a single stride. Night had fallen. A glance at the radium-illumined dial of his wrist-watch told him it was past ten o'clock. There was a full moon in the sky, pouring a flood of silver radiation down to Earth.

The moonlight clearly revealed the field with their plane resting on it. Beside the plane, the hole Jean Chapman had been digging was a vague dark blotch. Baden's eyes swept over the scene and abruptly returned to the dark patch of fresh earth.

Something was rising out of that hole! Pushing the earth aside, like a gigantic mole thrusting itself to the surface, something was coming up out of the ground.

"W—what is that thing, Rolf?" Danny husked. "It's coming r-right up out of the ground! W-w-what is it?"

"I don't know!" Baden answered. "Shut up and watch."

Abruptly, as though the restraining pressure had been removed, the thing sprang upward into the air. Baden saw what it was. A sphere! A huge round ball.

"A balloon!" Danny gasped. "But how would a balloon get buried like that?"

"That's no balloon," Baden snapped. "No balloon could push itself up out of the ground. That thing is made out of metal, or I'm a cockeyed liar!"

There was growing excitement in the pilot's voice. He was an expert on all forms of ships that flew through the air: to be the crackerjack pilot that he was, he had to be an expert. But here was a sphere that could thrust itself out of the ground and leap into the air.

And it had no wings. It had no propellors. It wasn't an airplane. And the absence of exhaust jets showed conclusively that it wasn't a rocket.

A single question was thundering in Rolf Baden's mind.

"What is that thing?"

How had it happened to be buried in the ground? Where had it come from? Had it—incredible thought!—come up from *below?*

The rifle that had awakened them spoke again, adding its note of sinister menace to a night that was already suddenly tense with an inexplicable threat.

"It's the girl!" Danny hissed, pointing. "She's there in the shadow of the trees. And she's shooting at that thing!"

The flash of the gun had revealed Jean Chapman. She brought the gun up to fire again. And the sphere moved toward her. It had leaped out of the ground and had begun to circle the field like an airplane seeking a place to land, but now it darted straight toward the girl crouching in the shadows.

"Come on!" Rolf Baden rapped out. "This is where we take a hand in whatever is going on."

"B-but she told us to stay here," Danny protested with literal truth.

Baden was already moving. There was a door that led downstairs and out of the house, but he didn't have time to use it. The open window was handier and quicker. He thrust himself over the sill and dropped lightly from the second story to the ground. Although both men had removed their uniforms and had donned civilian clothes, they had kept their guns. Baden's pistol was in his hand before his feet touched earth.

"G-gosh!" Danny quavered as he took the same leap. "H-here goes nothing." The gunner did not hesitate. Where Rolf Baden led, Danny Walker would follow.

BADEN, racing toward the edge of the field, could see the sphere drop-

ping lower and lower. For the first time, he saw how big it was. It was at least thirty feet in diameter, possibly forty. And it moved with the easy grace of a swallow breasting an air current.

The girl's rifle thundered. Bright stabs of orange flame lanced from the gun. She was not, could not be missing. But the bullets seemed to have no effect whatsoever on the sphere. It was moving steadily toward her.

Baden ran silently. The first intimation the girl had that he was near was his pistol roaring an echo to her rifle. She turned a startled face toward him.

"We've come to help," he said huskily.

Those four words were a fair measure of Rolf Baden. He didn't know what was happening, didn't know what kind of fight he was taking a hand in. And didn't care. All he had ever needed to know was that somebody needed help. That quixotic urge had taken him all over the world, looking for an underdog who needed a lift. Here was a girl who needed assistance. That was enough for Rolf Baden.

"This isn't your fight!" she panted. "Get back inside. You may be killed!"

"So we may get killed," he repeated. "So what?"

She didn't answer. A loud hiss, like the air brakes of a heavy bus going into action, had come from the sphere. Its descent was slowed. It settled gently to the ground.

"Shoot it!" Jean Chapman whispered, the husk of a madly rising fear in her voice. "Damage it! Anything, so that it can't take off again!"

She flung up her rifle, poured bullet after bullet at the huge ball. The two flyers began shooting. Heavy slugs tore through the air, to strike with metallic clangs against the surface of the sphere.

Quietly it rested on the soil. Baden saw several round openings like portholes on its surface. He aimed at them but the moonlight was too indistinct to reveal whether he was hitting his target. Yet he got the impression that the sphere, absorbing the barrage of hot lead being poured against it, *was sitting there quietly watching them.*

Or something inside it was watching them!

Cold chills shot up Rolf Baden's spine at the thought. There was something inside the sphere! Until now it had not occurred to him that logically it should have an occupant. Or occupants. But, unless it possessed some incredibly uncanny life of its own, there should be someone inside directing and controlling it.

What was inside that metal ball?

Rolf Baden was as nearly fearless as any man who ever lived, but the instant he began to wonder what was in that sphere, for the first time in his life he knew the meaning of fear, the mad fear that is similar to the fear of the darkness, of the unknown.

It sat there in the moonlight and seemed to size them up. Then abruptly it hummed up into the air.

"Look out!" Danny yelled. "It may be going to bomb us!"

But it didn't attempt to bomb them. It rose straight up until it was well above the trees and then moved away, flying parallel with the ground.

"It's g-g-gone," Danny shuddered in abject relief.

"It's landing on the ridge!" Jean Chapman exclaimed. "See! It's coming back down again."

They could see it slowly settle down on a rocky ridge nearby.

"Maybe we put a slug through its gas tank," Danny hopefully suggested.

ROLF BADEN slowly shook his head.

"That's probably what happened!"

the girl said excitedly. "We damaged it. And we've simply got to get to it before it's repaired. Come on!" she flung back over her shoulder as she darted off toward the ridge.

"Just a minute," Baden called to her.

The girl turned. "But you said you wanted to help!" she exclaimed. "Of course, if you don't want to, that's your business. But you said—"

"And we meant it," Baden interrupted grimly. "But before we go dashing off to tackle that thing, we had better know what we're doing. What is that sphere? What's inside it? Who invented it? What's going on here, anyhow?"

"I—" the girl began. "I don't know what it is and I don't know what's inside it," she said unconvincingly.

"You don't know?"

She shook her head.

"But it came out of the hole you were digging!" Baden exploded. "And you know more about this than you're telling. Come on, girl; give!"

"I know—only a little. And I don't have time to explain what I do know. And it's desperately important that I reach it immediately. If you want to help, all right. If you don't, you can stay here!"

Without another word, she turned and ran toward the ridge where the sphere rested.

"Y-you think she luring us on, huh, Rolf? You think she's telling the truth, huh?"

"I don't know," Baden answered, his face dark with anger. "But we don't have much choice except to help her."

They raced after the fleeing girl. Coming to the top of the ridge, she was still ahead of them. The sphere was resting in a jumble of huge boulders. There was no sign of motion anywhere about it. With its portholes dark, it looked entirely inanimate.

Jean Chapman was edging cautiously toward it. Lithely she moved from boulder to boulder, taking advantage of every spot of cover.

"Be careful, girl," Baden hoarsely called.

The sphere did not move. She raised her rifle, fired a quick shot into the huge ball. The bullet sullenly clanged against the metal.

"It's been damaged!" the girl cried. "It's out of order."

"You had better be darned certain of that before—" Baden stopped in midsentence to stare in horror at what had happened.

THE huge sphere had not moved. With the speed of spring steel, a door opened in it. Out of that door, moving with clanking ponderousness but with a rapidity entirely out of proportion to the huge bulk, there came—

"G-golly, it's a man in armor!" Danny gasped.

"Man in armor, hell!" Baden snapped, leaping forward. "That thing is made out of metal. If it's not a living robot, it's the next thing to it."

As he leaped forward in a desperate attempt to save the girl, the big pilot clearly saw the monstrosity. It was big, far bigger than a human being. Great, glaring, unwinking eyes gleamed in its broad head. Huge arms waved angrily.

Things happened too fast now for even Rolf Baden to follow them. He caught a vague glimpse of a length of snaky metal cable reaching from the head of the monstrosity back into the hollow interior of the sphere. He saw Jean Chapman fling up her rifle and fire. The bullet clanged venomously as it struck but the creature never faltered in its stride. The girl saw it was coming too fast for another shot. She dropped the gun and tried to leap to one side.

The metal monstrosity snatched Jean Chapman into its arms and stopped dead in its tracks. Baden did not dare fire for fear of hitting the girl. Desperately he threw himself forward.

THE metal man whirled. Two ponderous but exceedingly rapid strides, and it was back in the sphere. The door clanged shut in the face of the racing pilot. A vast humming came from inside the ball. With a roar of wind, it leaped upward into the sky.

But this time it didn't stop after it had risen a short distance. It kept on going—*straight up!* Rising with incredible speed, it became a black dot against the face of the moon. Then it was gone. From the time the door of the sphere had opened until the metal ball was out of sight in the sky, not more than four minutes had passed.

"It got her!" Danny whispered shakily. "It meant to get her down there on the field, but we c-came up and scared it off. It was j-just waiting for her to come up here so it could jump out and grab her. Oh, g-golly, Rolf, what is it, huh? What is it?"

The big pilot was too shaken to try to answer. He had seen something that all his previous experience had said was impossible—a wingless object rising straight up into the air. But far more important than that was the fact that Jean Chapman had been kidnapped, only kidnapped was too insignificant a word for what had happened.

Suddenly— "There it is coming back!" Danny hissed.

The metal sphere was driving along a few hundred feet off the ground, coming with inconceivable rapidity from the east.

"That isn't the same one," Baden rasped. "It simply couldn't have moved fast enough to get over there. That's another one."

He thought rapidly. "Get out in the open, Danny," he suddenly commanded. "Wave your hands, shout, fire your pistol, do anything!"

"B-but it'll see me," the gunner objected. "It'll come down and grab me."

"That's just exactly what we want," Baden answered. "You lure it down, and when that black hobgoblin jumps out, we'll take over."

"M-me wait for that metal giant to jump on me?" Danny protested.

"Yes, you! There's a chance in a thousand that we may be able to capture it if we can get it to land. I've got an idea." Baden quickly explained his plan.

"Oh, hell, here goes nothing," Danny gulped resignedly. "But I sure h-hope your plan works!"

CHAPTER III

The Trick

"COME on down here, you big ball of cheese!" Danny yelled, firing his pistol and waving his arms. "Come on down and fight like a man!"

Rolf Baden, crouched out of sight among the rocks, felt a lump rise in his throat as his companion's daring challenge rang out. Good old Danny, Baden thought. If his own plan failed, the price the little gunner would pay would be his life. Baden's lips set in a grim line at the thought. His plan *must* not fail!

He saw the sphere swerve in its headlong flight and shy away like a skittish horse sighting a piece of paper. It had seen Danny, Baden knew. But would it descend? Or would it merely circle overhead, detect the trap, and bomb both of them out of existence?

It began to circle. Rolf Baden held his breath.

"Come on and help yourself to a

chunk of me!" Danny yelled. Under his breath, he whispered, "Oh, R-Rolf, is e-everything all right, h-huh?"

"As right as we can make it, Danny," Baden answered.

The huge ball dropped lower. It circled, settled, started to land, and then abruptly sprang into the air again. Baden did not move a muscle but his fingers ground into the butt of his pistol.

The sphere circled again. Then it landed! It seemed to sit and watch the puny, two-legged creature who had attracted its attention.

Danny moved toward it . . . Abruptly the door swung open. Clanking, the metal giant leaped out. It dived straight toward Danny Walker!

Baden leaped out of hiding. He heard Danny's yell of defiance change into a scream of terror as the giant scooped the gunner up with one sweeping flash of its metal arm. It turned back toward the sphere.

Calmly, his arm as steady as a rock, not a trace of emotion on his bronze face, Rolf Baden fired a single shot. The slug was aimed at the long snaky cable stretching from the head of the creature back into the sphere.

That was Baden's plan. To shoot the cable in two. The cable must serve to control the clanking monstrosity. If he could sever it—

The metal giant was already leaping toward the opening in the sphere when Baden's shot rang out. The big pilot was so close he could have touched the creature. He aimed at the spot where the cable entered the helmet.

And his shot went home! It struck its target! The cable jerked under the impact of the heavy bullet. A white shower of electrical sparks jetted out. With a sullen clank, the metal giant stopped moving. It stood for a second as though frozen. Then its arms relaxed and Danny Walker leaped free. His jump threw the monster off balance. It fell like a tractor turning over.

"Y-you did it, Rolf! You did it!" the gunner exulted.

"Are you all right?" the big pilot fiercely demanded.

Danny hastily felt of himself. "J-just had the wind squeezed out of me. I'm all right."

"Then come on," Baden commanded, leaping toward the sphere.

The door was still open. He looked inside, gun ready, expecting to find someone seated at the controls. The controls were there, all right, a bank of levers and switches, but there was no one inside the sphere. The girl was nowhere to be found.

"N-nobody home," Danny gulped. "Rolf, this thing must work by remote control."

"Probably," the pilot answered, mystified. He stepped inside and began to look around. Danny Walker followed him.

"W-what are we going to do now?" the gunner demanded.

"We're going up," Baden answered. "Miss Chapman went up. We're going to follow her."

"B-but you don't know how to fly this thing!"

"I can fly anything that has a motor," Baden clipped. "Pull that cable inside and close the door. We're going to take off."

DANNY yanked the end of the severed cable into the sphere. Oddly, it was no longer emitting sparks. He closed the heavy metal door. Instantly the sphere was filled with the roar of a heavy pulsation. Power to burn was being applied. The globe shot into the air.

"We're going up!" Danny shouted. "You sure can fly anything!"

Baden was desperately working with the levers. There was a look of startled surprise on his face.

"Slow her down, Rolf," Danny yelled, clutching at the sides to keep from being pushed to the floor by the tremendous acceleration. "We're rising too fast."

"I can't!" Baden yelled. "I didn't even start it. When you closed the door, the damned thing started automatically. There's not a damned thing I can do to control it."

The sphere hurtled upward, Baden trying to learn how to operate the levers.

"The controls seem to be locked," he groaned at last.

"G-golly, where are we going?" Danny wailed.

"I don't know," Baden replied.

An hour later, however, he began to suspect the answer. The sphere was out of the atmosphere in minutes, but it was perfectly sealed, and a hidden mechanism seemed to be creating air. It kept rising. Long before two hours had passed, Baden knew where the globe was heading.

He pointed up in the sky toward the huge golden planet hanging there.

"This metal sphere didn't come up out of the earth," Baden said. "It came from the moon. And it's returning there!"

There was no mistaking what was happening. Incredibly, impossibly, the sphere was driving straight out across space to the moon. Moving with tremendous speed, it covered the 240,000-mile distance from the earth in a few short hours. Rolf Baden gazed in stupefied amazement as the surface of the satellite came hurtling up toward them.

When he had first seen the metal sphere, he had known he was on the trail of some tremendous mystery. But that the mystery would lead him to the moon, he had not the slightest intimation. And what was back of the mystery? What incredible secret had they stumbled into? The cold winds of rising fear played up and down the pilot's spine.

Far below them, slowing to a halt above the surface of the satellite, Rolf Baden caught a glimpse of another sphere; and he knew, without knowing how he knew it, that this was the globe in which Jean Chapman was held prisoner.

Then the rescuers' sphere began to slow up.

"W-we're g-going to land," Danny whispered. "Oh, golly, look! There's a hole opening in the side of one of those m-mountains, and that s-sphere is going right into it!"

The lunar landscape, seen at close range, was a tortuous jumble of cracked, distorted, broken mountains glittering in intensely brilliant sunlight. They had left Earth at night, with the moon in the sky, but here the sun was shining.

In the side of one of the cliffs, a dark opening had suddenly appeared. The kidnaper sphere ducked into it and out of sight. But the hole remained open.

"We're going in, too," Baden gritted.

The ball in which they were held captive slid into the opening and halted. Behind it the door closed. Ahead a second huge portal began to open.

"It's an airlock!" Baden exclaimed.

The two spheres moved through the lock and into a tremendous cavern. Hissing, they settled down to rest.

"L-look!" Danny whispered. "The place is l-lousy with those metal giants!"

BADEN was already staring. His face was drawn and taut, his eyes wide as he tried to see everything at

once. In a row against the farther wall, he saw dozens of the spheres arranged in an orderly manner like cars parked in a storage garage. There was a jumble of intricate machinery, the function of which Baden could not even begin to guess.

But the things that held his eyes were the gigantic metal monsters. They seemed to be everywhere, exact duplicates of the one that had leaped from the sphere and had seized Jean Chapman, with this exception—the metal monsters here in this cavern did not have cables attached to them. Instead, their helmets were adorned with a spidery framework of wires.

Clanking, the creatures converged on the first sphere. Baden saw the door open and the metal occupant step out, the girl in his arms, the cable trailing behind him. Releasing the girl, he reached up and pulled the cable from his helmet. One of the other creatures promptly attached a spidery framework in the place where the cable had been, plugging it in like a light cord in a socket.

The girl cowered like a frightened rabbit, staring frantically at the creatures who surrounded her. One of them took hold of her arm, and the others started toward the second sphere.

"T-they're coming for us," Danny hissed. "Oh, Rolf, do you think those d-darned things are alive?"

"They can't be alive," Baden answered. "They simply must be robots worked by remote control."

"W-what are we going to do?" Danny stuttered.

"What the hell can we do?" the big pilot answered. "Except keep our chins up and act like we owned the place!"

"O-okay. B-but I wish I was back on E-Earth."

"Keep your gun out of sight," Baden commanded. "They may not search us."

The door of their sphere was opened. Two unblinking eyes in a metallic head peered inside.

"They want us to c-come out," Danny wailed.

"That's exactly what we are going to do," Baden answered.

HIS back straight, his shoulders square, he stepped from the sphere like a general reviewing his troops.

A robot took his arm with a firm grip. Baden made no attempt to resist. The strength in those steel fingers told him that resistance would be useless. The robot could tear him limb from limb. Another robot took hold of Danny. They walked the two men over to where the girl stood.

"How did you get here?" she faltered. "What happened?"

Baden told her about the second sphere, how they had captured it and how it in turn had captured them.

"I'm sorry," she said. "I didn't intend to get you into a mess like this."

"What I want to know is, what kind of a mess is this?" the big pilot demanded. "What are these things, anyway?"

"I—I don't know," Jean Chapman replied.

Baden's mouth snapped shut. If she wanted to pretend she didn't know what was going on, there was nothing he could do about it.

"Honestly, I don't know," the girl wailed, watching his face.

She was telling the truth! She wasn't lying. Incredible as it seemed, she really didn't know.

"All right, Jean," Baden told her. "We're in this mess together and we'll try to fight our way out together."

Clanking ponderously, the robots led them out of the main chamber, down a long corridor and, after opening a door, into another, smaller room. Baden saw

that there had been machinery in this room very recently. The marks of heavy equipment were on the floor. But the machinery had all been removed. Now the only furnishings in the room were a heavy chair and a crude bed.

A man was lying on the bed, a raggedly clad, bearded, emaciated man. He sat up when they entered the room. Jean Chapman wrenched loose from the robot and flew straight to his arms.

"Dad!" she cried. "Dad!"

THAT single word and the sight of this man lying there closed a circuit in Rolf Baden's mind. Ever since he had learned Jean Chapman's name and had caught a glimpse of the machinery in that barn-like structure back on Earth, he had known he had seen the name somewhere before. But where? Now he remembered. A newspaper feature story flashed before his mind's eye.

INVENTOR TO TRY FOR MOON

The story had read:

John Chapman, who claims to have invented a new type of rocket ship, plans to put his invention to the acid test tomorrow. From his laboratory on the coast of northern Maine, he will take off for the moon. . . .

The account had run on at great length in a humorous vein. There had been pictures of Chapman and of his ship. Also, there had been a picture of "the attractive daughter of the inventor, Jean Chapman, who will remain here and operate the radio apparatus with which her father hopes to maintain contact with Earth on his daring voyage."

Chapman had taken off on schedule, and when he had not returned, it was assumed his ship had fallen into the Atlantic. The newspapers had commented on the passing of another crackpot inventor. The story was at least three years old, Baden recalled.

But Chapman hadn't fallen into the Atlantic. He hadn't been a crackpot inventor. He had been successful. He had landed on the moon. There was no refuting that he had reached Earth's satellite, for he was here now, frantically hugging his daughter.

But what had happened to him? And who were those robots? Were they Moon men? Why had they seized Jean Chapman and brought her here? Possessing the metal spheres, which were an almost perfect method of crossing space, why hadn't they been on Earth before?

Moments later Jean Chapman introduced the two airmen to her father. Baden, even his iron control deserting him, as soon as the robots withdrew, broke out in a rash of questions.

"The robots were here when I landed," John Chapman explained. "They captured me and have held me prisoner ever since. Even after three years I do not fully understand them, but I know this much: *In some uncanny and incredible way, they are alive.*"

"Alive!"

"Yes. But they are not Moon men. They did not originate here on the moon. They came here from somewhere else, and they are a surveying party."

"A surveying party!" Baden incredulously echoed. "What do you mean by that?"

CHAPTER IV

Surveyors of Space

JOHN CHAPMAN explained fully. "They belong to a race whose home is on one of the nearer star-clusters—

which one I don't know. It is an incredibly ancient race; it was old before our solar system was created. And this race for uncounted centuries has been sending exploring parties out across space, mapping and charting the worlds in the sky, looking for valuable mineral deposits, studying the life-forms on the various planets.

"That's why I call the group that has captured us a surveying party. They've been surveying the solar system, mapping the planets, the asteroid belt, Mars, Venus, Mercury, Jupiter, Earth—"

BADEN'S mind reeled with the immensity of the picture the old scientist was painting. A surveying party! Back on Earth, he knew surveying parties were frequently sent out, to map the headwaters of the Amazon, to explore the North Pole. Right at this moment Admiral Byrd was surveying the Antarctic.

But that was on Earth. Surveying parties there crossed seas and mountains and deserts. This party here on the moon had crossed *space*. They were charting solar systems, star clusters, possibly even galaxies.

"They treated me well enough," John Chapman continued. "They went to the trouble of synthesizing food and water for me, but for that matter, we take good care of the animals in our zoos too. And that is the way they regarded me—as an intelligent, captivating pet, a curiosity to take home to the children—if they have any children and if they ever go home."

There was unmistakable bitterness in the old scientist's voice.

"I take it something happened that made them change their minds about you," Baden said.

"Yes," Chapman answered. "They gave me free run of the place, except that I couldn't go near the spheres and I couldn't venture outside. Since I displayed some slight mechanical ability, they gave me tools to work with, just as we give the monkeys in the zoo building blocks and balls, and watch them to see how smart they are.

"When I asked for tools and equipment, I got them, and the robots thought the electrical gadgets I built were darned cute—until they discovered I had built a radio set and was using it to communicate with my daughter back on Earth."

Baden remembered it was Jean Chapman who had remained behind to operate the radio set on the Maine coast. How long had she kept a faithful vigil beside those silent instruments before a signal came through, he wondered. And how that first, faint signal must have thrilled her. He glanced at the pale girl. She was standing beside her father.

"As soon as you started your radio transmitter, they decided their pet had displayed enough ingenuity?" Baden said.

"No, they didn't discover my transmitter for a long time. I got the whole story back to Jean."

"The devil you did!" Baden gasped. He looked again at the girl. "Why didn't you advise the authorities and get somebody to help you?"

"I did!" the girl blazed. "I tried to tell everybody from the President of the United States down to the last subeditor of New York's biggest newspaper. Every last one of them gave me a fish-eyed stare, as if they thought I was trying to sell them something.

"Finally I realized that if I kept trying to tell my story, which I knew was the truth, but couldn't begin to prove, it would get me a bed in a psychopathic ward."

She began to cry. "Now, now, Jean,"

her father soothed. "You did your best. It wasn't your fault that nobody would believe you."

"I'll say it wasn't," Baden gritted. "But what happened when the robots discovered your radio set?"

CHAPMAN nodded toward the floor. "You can see what happened. I had this room full of equipment. You can see where it rested."

"They cleared it out, eh?"

"Before they did, I was able to get a warning message through to Jean, telling her to be on the lookout for anything. Knowing I had been communicating with her, they sent a sphere down to Earth to investigate. What happened to that sphere, daughter?"

"It miscalculated the greater gravity of Earth and buried itself in the ground when it landed."

"S-so that was what was in that mysterious hole you were digging." Danny spoke for the first time.

"Yes," Jean admitted. "I saw it land. From my father's description, I recognized it as being one of the space spheres of the creatures here on the moon. I was trying to dig down to it, destroy its occupant, and use it to try to rescue my father."

Baden's heart thrilled at the words. He was an adventurer and he had faced death in the four corners of the earth, but he had never seen a better grade of courage than that displayed by Jean Chapman in trying to dig up the buried sphere. She knew how dangerous it was but she had not hesitated. Instead, she had taken a shovel and a rifle and started digging.

He grinned at her and she smiled back at him.

"B-but what I want to know," Danny demanded, "is w-what are they going to do with us, now that they have us?"

Chapman's eyes went from the two men to his daughter.

"I don't know," he answered. "They seized Jean to keep the human race from learning about their existence. They have finished their survey of the solar system and are about ready to leave. But I don't know what they're going to do with us."

His eyes were on the girl. There was pathos and tragedy in her face.

"Father!" she said. "You *do* know."

The old man shook his head.

"You're not telling the truth," she said accusingly. "You're keeping something back!"

"No," her father miserably answered. "No."

"You're trying to make it easier for me," she said. "Whatever it is, I can take it. Are they going to take us back to their home world with them?"

"No," the old man quavered. "Not that. We couldn't stand the trip. It would take too long. We would die on the way."

"Then what are they going to do?"

"Jean, please—" the old man begged.

"Are they going to invade Earth, destroy the human race?" Jean demanded.

"No. A thousand or possibly ten thousand years from now, they may return to this system, if they ever need the metals they have discovered here. But this is only a surveying and exploring party. It isn't going to attack Earth."

"Then what?" the girl insisted.

John Chapman looked at the floor.

"Remember, we're like animals in a zoo to them. And now the keepers of the zoo are leaving. What will happen to the animals? They can't return us to our homes. With the knowledge I now have, I could duplicate their space sphere in a few years."

"So what are they going to do with us?" Baden said crisply. "We're scarcely children, you know. Whatever it is, we can take it."

"All right," the old man said. "I'll tell you. We're animals in a zoo and the keepers are going away on a trip that will last for years. They don't want the animals to starve, and they can't turn them loose. So they're going to do the only thing they can—painlessly put us to death."

THE hiss of Jean Chapman's indrawn breath was loud in Rolf Baden's ears. There was a moment of stunned, horrified silence. Then Danny, drawing upon that hidden store of courage that sustained him when the situation became desperate, drawled,

"Painlessly put us to death, huh? Well, all I can say is that it's d-d-d-damned white of them!"

"We aren't dead yet," Rolf Baden said grimly. He turned to the elderly inventor. "Isn't there anything we can do? If we promise never to attempt to construct one of their space spheres, do you think they will take us back to Earth and release us?"

The old man slowly shook his head.

"I don't think there is a chance. They're coldly logical, utterly impersonal, and while they treated me all right, it was merely because I was an interesting scientific experiment. Also, they have made accurate estimates of the population of Earth, and they realize the human race would be a strong competitor if we had a method of crossing space.

"They have no intention of letting us develop to the point where they would have to fight us in the future. No, there is no hope in appealing to their better nature, for they haven't any. They are making a great concession in killing us painlessly."

The words had the finality of doom.

"Then," said Baden bitterly, "is there anything we can do to save ourselves? You are familiar with these creatures. Do they have a weakness anywhere?"

The old man still shook his head.

"I had a plan worked out once, but there is no hope for it now," he said hopelessly.

"What was your plan?" Baden insisted.

"It won't work," Chapman answered unhappily.

"How do you know it won't?"

"Because it depended on a powerful radio transmitter I had built secretly. But when they removed all my equipment, they took my transmitter with them. You probably don't know it but these creatures live on power, electrical power. In their space-crossing spheres they have powerful generators which they connect by means of a cable to themselves.

"Here in their caverns they have even more powerful generators, which 'broadcast' their energy. In order to give themselves greater freedom of motion than the cables would permit, they use power transmitted by radio, receiving the current through the antennae they wear on their forehead.

"My plan was to use my transmitter to block out their power; just as two radio stations on Earth, if they are operating on the same wavelength, block out each other. This wouldn't kill them—nothing kills them short of complete destruction—but it would make them helpless. But it won't work now," Chapman finished with a hopeless shrug. "My transmitter is gone."

Baden's mind was racing. He remembered how the robot, on entering the Moon cavern and emerging from the sphere, had disconnected the cable from the top of his head. Another robot had promptly plugged in an antennae.

"Why can't we destroy that radio transmitter?" Baden demanded.

Here was a chance, a thin one, but

still a chance! Deprived of radiated power, the robots would be helpless. For the first time John Chapman's face showed hope.

"It might work," he admitted. "If we could get to the radio room—"

"We have to get there!" Baden blazed. "Do you know where it is?"

"Yes."

"Then let's go!"

"But we can't get out of this room," Danny interrupted.

Baden was the picture of chagrin.

"Hell, that's right," he admitted.

"One trick the robots never knew was that their guinea pig had learned how to open the door of his prison," Chapman said. "I can open that door, but what if we run into some of the robots?"

"Shoot them," Baden answered unhesitatingly. "We still have our guns. Shoot at the antennae on their heads! With that knocked out, they won't be able to move."

"We hope!" Danny amended. "What I want to know is, don't these metal men have some g-guns of their own?"

Baden looked at the inventor for an answer.

"Yes," Chapman said. "They have disintegrators that will melt solid rock. That's how they dug these caverns."

"To hell with the disintegrators!" Baden snarled. "Open that door!"

CHAPTER V

The Animals' Revolt

THEY were in the corridor, Chapman leading the way, Baden and Danny Walker with drawn guns, nervously alert. Danny's freckled face was wrinkled into a fighting snarl. All fear was gone from him. Baden's face showed nothing, but the big pilot knew how hopeless were the odds against them. At any minute they might run into one of the metal giants. Then, unless they could disable the antennae that fed power to the creature, they would be helpless.

But they were met by none of the robots.

"I think most of them are up in front getting the spheres ready for the trip home," Chapman whispered. "And that's a lucky break for us. But there are certain to be several of them in the room with the power transmitter. We'll have to knock them out before they realize what is happening. And now that we have revolted against them, they will exterminate us mercilessly, without bothering to devise a painless death method."

Three men and a girl against raiders out of space! Human flesh against steel, human strength against the resistless surge of electric current! All of the four knew that their lives were numbered in minutes. In spite of their show of bravery, they knew they didn't have a chance. But because they were human, and because life was dear, they were going to exact as high a price as possible for the death they knew was coming.

Chapman, motioning them to move over against the wall, approached an opening.

"That is the entrance to the power room," he whispered tersely. "The door is open."

A throbbing roar was coming from the chamber, the hum of powerful generators.

"I'll go first," said Rolf Baden, lifting his voice above the volume of sound.

He glanced at Jean Chapman. Her face was white and bloodless but there was resolution on it. She tried to smile at him.

Then, slowly and cautiously he thrust his head around the corner of the open-

ing, and looked inside.

It was a large room. Immediately to the right along the wall was a huge switchboard that apparently controlled the flow of current from the generators to the power transmitter.

"If we can only reach that switchboard, we'll have a chance," Baden gritted.

"Yeah, but look over there to the left," Danny hissed.

There were at least six of the metal monsters on the left. They were as busy as bees around a device that looked like a cross between a concrete mixer and a coast defense gun.

"Come on before they see us!" Baden gritted, diving into the room.

The switchboard was only yards away. His first driving rush would take him to it. The metal monsters, busy around the machine, did not see him. Nor did Baden see the metal man standing beside the switchboard until he was completely in the room. The angle of the corner had kept Baden from seeing the creature.

The switchboard wasn't unguarded!

No surprise showed in the lensed eyes of the metal giant as he saw the human being hurtling toward him. No emotion could show in those lusterless orbs. But he reacted instantly. Clanking ponderously, but moving with the tremendous swiftness of which his kind was capable, he stepped in front of the charging pilot.

Baden sent a slug through the spidery framework of the antennae on the monster's head. His heart was up in his mouth when he pulled the trigger. If the antennae were smashed, would the creature be unable to move? Chapman had said that this would happen, but was Chapman right? When Baden had shot the cable away from the robot's head back on Earth, the robot had stopped instantly. But would smashing the antennae have the same effect?

To Rolf Baden an eternity seemed to pass while he watched to see the effect of his shot. The robot was moving toward him. And it kept coming! It kept moving. His shot hadn't disabled it. Their plan had failed!

INSTINCTIVELY Baden leaped to one side to avoid the rush of the monster. But the creature didn't swerve. It kept driving forward. With a thud like a truck hitting a brick wall, it fell to the floor. Fell, and didn't attempt to rise!

Stupefied, Baden stared at it. Then he realized what had happened. His shot had smashed the antennae but the robot had been in motion at the time and its inertia had kept it going until it fell.

"It works!" Baden exultantly thought. "Smash their antennae and they're powerless!"

He started again toward the switchboard.

The roar of a pistol behind him whirled him around. Danny was doing the shooting. The six robots who had been busy around the machine were driving toward them. They looked as big as six separate mountains. And in the next moment they were on the two airmen.

"Take this back to hell with you, you black devils!" Danny was roaring.

Now that the need for silence was past, the gunner was using his voice. Danny Walker would die with a shout of defiance on his lips. And death was seconds off.

One of the robots, its antennae shattered by a bullet, went down. But the other five kept coming.

Rolf Baden began to shoot. He might have been at target practice for all the emotion he showed. Coolly and calmly, he brought the pistol up and

fired. He saw the fragile antennae of the nearest monster crumple. One down.

But there were four more left. Baden shot again. Another went down. He pulled the trigger a third time. The gun clicked! He had not reloaded it after he had left Earth—no cartridges. Out of the corner of his eye he saw Danny snapping an empty weapon, too.

"This is the end, Danny," he breathed, hurling the empty pistol at the metal monster looming over him. "We'll go out together."

Then the black giant grabbed him. Fingers of steel closed around his body. He felt himself lifted. He fought with all his strength, but against the power that energized the creature his muscles were useless. Vaguely he saw Danny struggling in the grip of another of the monsters, struggling uselessly.

Baden felt himself shaken like a dog shaking a rat. Only he was the rat and he was being shaken. Blackness began to close in on him. There was a growing roar in his ears—

Suddenly the roar stopped. The robot had quit shaking him. The strength went out of the monster's steel fingers. Its grip began to relax. Baden slid exhausted to the floor. Dazedly he stared around him, seeking an explanation for the fact that he was free. And found it.

Jean Chapman and her father were at the switchboard. While he and Danny had fought the metal monsters, they had slipped unobtrusively into the room and had opened the switches, cutting off the flow of current through the power transmitter. The robots stood like suddenly frozen giants!

Danny struggled to his feet. Violently he shoved the creature that had held him. It tumbled over.

"Take that, darn you," Danny growled. Then he ran to Baden, tried to help the pilot to his feet. "Are you all right, Rolf, huh?" he anxiously inquired. "Are you all right?"

"Yes," the pilot answered.

Whether or not he was all right didn't matter. There was only one thing that did matter. They had secured control of the power transmitter! The raiders out of space were now powerless!

"We'll return to that cavern at the entrance," Rolf Baden said. "We'll take these damned robots apart, each and every one of them, and make certain this particular surveying party will never take a list of the wealth of the solar system back to whatever godforsaken world spawned them. Then we'll grab one of those interspatial spheres and head for home."

"Home!" Danny echoed. "And this time," he fiercely added, "we're going to settle down and stop this damned fighting! Soldiers of fortune, nuts!"

"We've won!" John Chapman gasped. "I never thought it possible, but there is no doubt that every one of these metal devils is standing around powerless to move!"

HE broke off, to stare from horror-stricken eyes at the door. Baden turned to see what was attracting the inventor's attention. He saw it—a sphere coming down the corridor, moving slowly but certainly toward the room.

"Some of the robots must have been working in the spheres," Chapman stammered. "They were drawing current from the power supply within the spheres instead of from the radio transmitter. Naturally, this first power supply remained on. But those robots working outside the spheres, using their antennae, stopped work the moment we turned off their 'broadcast' power supply.

"Their comrades, using the power

source within the spheres naturally became alarmed, surmised what we were up to. So they carried the paralyzed robots inside and connected up their power cables. Now the whole mob of them is descending upon us in their spheres!"

"Close that door before that sphere gets in here!" Baden rasped.

He and Danny leaped and closed the heavy metal barrier.

"That will stop those devils," Danny said. "But what are we going to do? If they can't get to us, neither can we get to them. We're trapped in here!"

The gunner had voiced the truth. The four stared at each other.

"Not only that," Chapman said. "But they will be able to melt that door down within a very short time. Those spheres are armed with disintegrators."

As he spoke the hiss of heavy currents came from the corridor. Danny laid his hand against the door.

"They've already turned the juice on," he said. "The door has begun to get hot."

"Isn't there anything we can do?" Baden raged. "We're caught like rats in a trap. Isn't there any way we can get out of here?"

"There are connecting corridors," Chapman answered. "We can hide. But it won't do us any good. They'll find us in the end."

"We'll hide, then!" Baden commanded.

He started to marshal his three companions out of the room. Chapman stopped to stare with suddenly glowing eyes at the device the robots had been working on when the two men first entered the room.

"That's one of their disintegrators," he rapidly explained. "One of the big ones that they use to dig caverns with."

"We'll turn it on the spheres," Baden shouted. "They'll have a fancy time getting into this place with one of their own weapons turned on them."

The inventor leaped over to the huge weapon. He took one look at it and all the fire died out of his eyes.

"It's all apart," he said. "They were dismantling it when you came in."

"Then we'll put it together again," Baden rasped. "You surely know how. All three of us will help you."

"It will be a tough job," Chapman said.

"But we'll do it, huh, Rolf?" Danny chortled.

Working like fiends, they began to reassemble the bulky device. Parts were scattered all over the floor. Apparently the metal monsters had been taking it apart, preparatory to putting it into one of the spheres for the return trip to their own world. Baden, glancing often toward the door, drove himself and the others like slaves. The inventor directed their efforts. Danny and Baden lifted the heavy parts. Jean Chapman helped where she could.

Smoke began to pour from the door.

"It's g-going down," Danny whispered.

"We only need minutes," Chapman answered.

Sweat stood out all over the inventor's face. His ragged clothes were wet with perspiration. But he worked like a madman. And Baden drove him to fiercer efforts.

Just as the door went down they fitted the last piece back into the disintegrator and swung the barrel around.

"I'll aim," Baden gritted, lining up the huge device.

The door went down into molten metal. A sphere came poking through.

"Fire!" Baden yelled.

A STREAK of bluish flame lanced out from the muzzle of the weapon. It swirled over the sphere in a coruscat-

ing blaze of blue-white radiance. So hot was the blast that the sphere literally seemed to burst into flame. The tough metal flared in great white-hot droplets, then burst into vapor. The occupant never had a chance.

"That will teach you something about painless forms of death," Baden raged.

Inwardly he knew that the occupant of the sphere, whatever incredible form of life it possessed, had died so quickly that death was practically painless.

The first sphere was finished, then.

"But w-what about the others?" Danny quavered. "That cavern up in front is f-full of them. We may knock off one or two, but they'll g-get us in the end."

"So they will," Baden answered. He thought rapidly, and turned to Chapman. "You say they used this disintegrator to dig this cavern?"

The inventor nodded.

"Then I know what we'll do about that nest of spheres up in front," Baden answered. "Come on, Danny. Put your shoulder behind this thing and push."

"W-what are you going to do?" the gunner demanded.

Baden told them.

It took the combined strength of all four to move the disintegrator. Fortunately it was mounted on wheels, for the robots had frequently found it necessary to move the device when they enlarged their caverns. An hour later, after pushing it along little-frequented corridors, Baden had it where he wanted it. He lined it up with the muzzle facing a blank wall.

"Turn the juice on," he commanded.

The flame licked out, began to eat into the rock. It had blasted the sphere very rapidly, but it destroyed stone even faster.

"G-golly, I hope your plan works," Danny muttered.

"It will," Baden answered grimly.

The beam ate into the stone like a knife slicing through butter. Rolf Baden swung it to the right and to the left, digging a gigantic horizontal groove in the rock. Then he swung it down.

Suddenly the whole vast layer of rock gave way. Its support gone, cut loose from the top and the sides, the only thing it could do was fall. And it fell—straight into the cavern!

That was Baden's plan. To use the disintegrator to cut away the roof of the cavern, releasing thousands of tons of rock to crash down on the spheres below.

And it succeeded! Like a gigantic landslide, the roof began to fall. Thousands, hundreds of thousands of tons of rock started downward. The roof buckled in the middle, tremendous cracks spread rapidly through it. Then, like an avalanche gathering momentum and sweeping everything before it, it dropped downward.

The sound was like the roar of hundreds of cannon being fired in one vast chorus. The solid rock underfoot swayed and trembled. Gigantic thudding concussions sounded.

"Some of the spheres are exploding," Chapman said breathlessly.

"The ones that explode will help to smash the others," Baden answered.

The roar grew. The crash and thunder of falling stone was a continuous sound. Some of the spheres, rising rapidly, tried to force their way through the torrent raining down on them. Baden swung the disintegrator, sweeping it in great arcs. Flaming, the spheres plummeted downward.

Slowly silence came. Slowly the thunder of falling stone died away.

"They're finished!" Baden exulted. "They're buried under more tons of rock than I can even count. This surveying party has met its Waterloo on the moon!"

WHAT he had done awed him. He had destroyed the advance guard of a race that was reaching out across space, sprawling as conquerors over the worlds in the sky. If another surveying party came— Well, they would not come for many years. And the human race would be able to meet them then.

He looked at Jean Chapman. She was trying to smile.

"W-what I want to know is, h-how are we going to get home?" Danny suddenly demanded.

"Home!" There was startled surprise in Rolf Baden's voice. "I never thought of that. We've destroyed all the spheres. How in hell can we get back to Earth?"

"I think," Chapman interposed, "that if you can dig out one of those spheres, I can guarantee to repair it so it will make the trip back to Earth. It may take months, however."

"That's all right with me," Danny answered. "At least we'll have a chance to settle down for a while."

Rolf Baden looked at Jean Chapman.

"What do you say?" he asked her.

"That," said the girl, coming into his arms, "is a leading question."

(Concluded from page 7)

vention after invention of an amazing nature is revealed and used with incredible results as the war progresses. Truly, this new war can rightly be called the first "science" war of history.

ON a recent week-end outing, your editor and his asssistant, who does a great deal to make the stories read smoothly, underwent an experience that reminded us of Orson Welles' "Invasion from Mars" scare. Of course, being science fiction editors, nothing of that sort could seriously perturb us, but here's the story anyway—

Our assistant, whose name in real life is Louis H. Sampliner, was playing the outfield in an impromptu baseball game, clad only in his bathing trunks. After catching several flies with great dexterity, (by scooping them up after they had stopped rolling), your editor sent a mighty smash out toward him. To our amazement he paid no attention to it, but instead, began a headlong flight, screaming in utter panic.

We watched, with our heart rising into our throat, as outfielder Sam fell headlong, scrambled along for yards on his hands and knees and finally regained footing, whereupon better speed was attained. We stared. Was he being pursued by invisible monsters from Mars? We saw nothing.

"What is it?" we screamed. "Don't leave us here to die without even knowing what threatens us!" And we began to thunder in pursuit.

When we finally caught him, and downed him with a flying tackle, we were exhausted, and miles from the scene. We sat astride him and panted:

"Great guns, Sampliner, what menaces us?" we demanded. "Is civilization in danger?"

He stared up at us and exclaimed, "Heavens, no. The danger is over."

"But what was it?" we asked wonderingly.

"What was it!" our co-worker protested in indignation. "Do you mean to say you didn't see it?"

"No," we admitted foolishly. "We didn't."

Whereupon Sampliner scrambled to his feet and cast an anxious glance horizonward. "It was," he breathed, "a bee. A perfectly tremendous bee. And it was going to sting me!"

So now you know, dear readers, the awful truth about the people behind AMAZING STORIES.

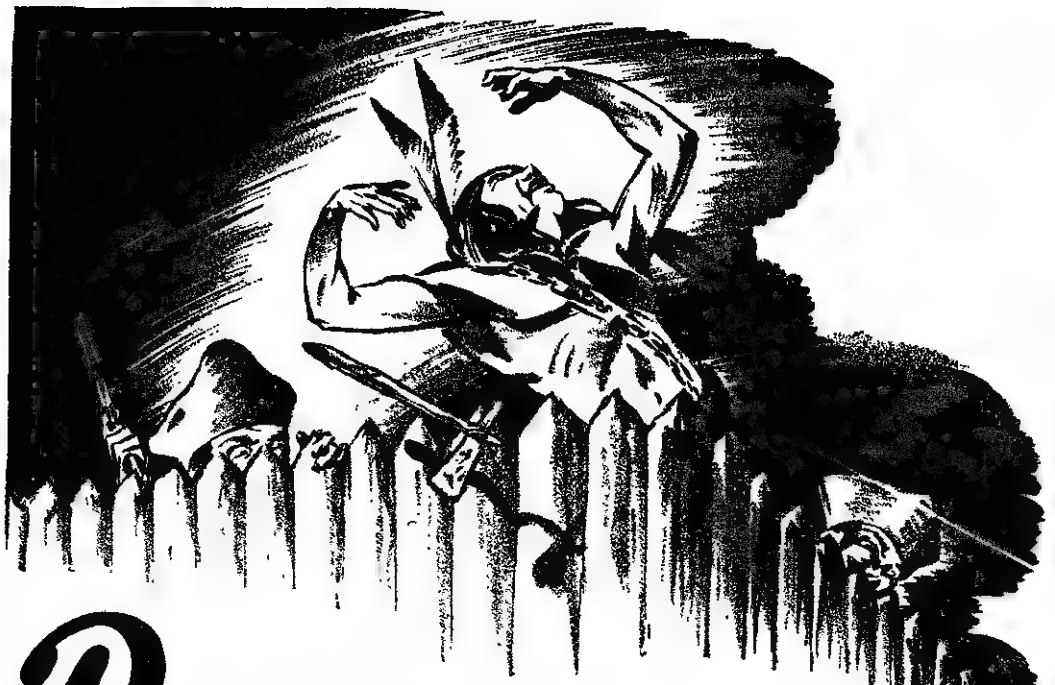
SOME time ago we had a rash of sunspots which played the very devil with communications. But to date, in spite of the extremely unusual weather we have been having, no one has blamed it on the sunspot plague.

It seems to your editor about time we pointed out that sunspots do affect weather, and that you will be perfectly safe in predicting that the whole summer will be filled with perfectly irritating inconsistencies and irking vagaries.

So don't go around complaining that the earth is changing its seasons. Everything is still under control, and Old Sol will relent next year.

RECENTLY our New York special agent, Mr. David Vern, went into a huddle with Manly Wade Wellman, and the result will become apparent in our next issue, with the first installment of a grand serial called "West Point, 3000 A. D."

We have been trying to get a good serial, to follow "Black World" and "Sons Of The Deluge" and "Hidden Universe," all very popular. We think we've succeeded. By all means, don't miss this West-Point-of-the-future yarn. It is Wellman's best. *Rap*



Rescue into the Past

By Ralph Milne Farley

Barney Baker traveled into the past to win the girl he loved, and found her in the arms of a rival named--Barney Baker!

"WHERE'S the masquerade?" I asked, as my young friend Barney Baker opened the door of his apartment, in response to my ring.

For Barney was decked out in a coonskin cap, fringed leather jacket and trousers, and moccasins. His gray eyes were shining with undue brightness, his mouth was a thin purposeful slit, and his chin projected belligerently.

"Where's the masquerade?" I repeated, as I quickly entered the apartment and closed the door furtively behind me, fearing lest someone might see Barney in his outré get-up, and think him nuts.

He grinned a crinkly-eyed grin. "That's what *they'd* ask if I wore present-day clothing. I'm wearing these togs so as to be *in*conspicuous, not conspicuous. But—"

He opened up the leather coat and pointed beneath his left armpit, where nestled a .45 automatic pistol in a shoulder holster. He patted his coat pockets, and they clinked.

"Lots and lots of clips of ammunition," he grimly added.

"Who's gunning for you this time?"

"Never can tell. I don't propose to get cornered by any bloodthirsty savages," was Barney's reply.

"What's in that big leather pouch, slung over your shoulder?" I asked.

"Sandwiches, and a thermos bottle full of coffee."

"Aren't there to be any refreshments at the party?"

"This is no party." Barney's gray eyes narrowed. "It's a law case. Remember how Cabot, Sears, O'Brien and Gardella hesitated to give me a job, because I majored in physics, instead of some pre-legal subject at college? Well, isn't it the irony of fate that the first big law case which falls into my lap requires physics rather than law for its solution!"

"How come?"

"Did you notice the historical marker on this house as you came in?"

"No," I said.

"It reads: 'On this spot stood Fort Randolph, burned September 1, 1776, by the British and Indians.' If I could travel back in time to that date and interview Ephraim Martin, perhaps I

Fierce yells came from beyond the stockade as I snatched the precious diary. I fired at a painted Indian

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could find out what became of his diary. The ownership of half the land in this city may depend on what that diary says."

"You're nuts! Time-traveling is baloney!"

"You think so? But at least you'll admit that it involves physics, rather than law."

"Okay on that point," Barney admitted. "Well, when do you intend to start building your time-machine?" I tried to put deep sarcasm into the words.

"I don't have to." Barney paused until I had thoroughly drawn the wrong conclusion from his words; and then he added, with a crinkly-eyed grin and a twitch of his tufted eyebrows,

"It's already completed. That's why I invited you here this evening. I want you to see me off."

"You're off your trolley already," I wisecracked. "Or else you're kidding me."

"Never more serious in all my life. Think what this will mean to my standing in Cabot, Sears, et cetera!"

I laughed at the absurdity, not of an intelligent man believing in time-traveling, which was absurd enough, but rather of a physicist's being so engrossed in the practice of law that he regarded the successful building of a time-machine not as an epoch-making accomplishment in itself, but rather as mere means to the winning of a lawsuit.

THESE thoughts ran through my head as I followed the young lawyer out into the hall and up the stairs to the roof of the apartment building.

Barney switched on the roof lights, disclosing a large knobby object, about ten feet high and ten feet square, shrouded in canvas. He whisked off the covering, and there stood an intricate rectangular parallelopiped of rods and wires and coils and prisms. In the midst of it was slung a combined battery box and automobile driver's seat, a section of floor, and an instrument board with dials and levers.

With a wave of his hand and an almost sheepish grin, Barney Baker explained,

"It's a combined time-machine and gravity neutralizer. The gravity part enables me to rise in the air a short distance and hover there, before going backward or forward in time—quite a necessary precaution, so as to avoid getting snarled up in some building. The time part involves the fifth to tenth dimensions, in a way *you* wouldn't understand."

"Thanks for the compliment," I dryly observed. "But what makes you think the darn thing will work?"

"I don't *think*—I *know*." His tufted eyebrows twitched, and his firm chin was thrust forward belligerently. "I've already traveled back four or five years several times, and you see I have managed to return alive. I've never tried the future—it didn't seem quite decent, somehow, to pry into the unknown."

I walked gingerly around the contraption, viewing it from all sides. It was quite different from what I imagined a time-machine should look like. In the writings of H. G. Wells and Ray Cummings, as I remember them, the time-machines built by their heroes were "a shimmering maze of" various materials, "strangely distorted," "having an air of unreality," and all that sort of high-sounding verbiage.

But this darn thing had an air of *reality* that was positively staggering. It was as competent and powerful appearing as a huge generator or a transcontinental locomotive.

"Well here goes!" Barney announced, as he crawled through the

maze of wires, and took his seat at the controls. "I'll be back in about an hour. Can't gauge it exactly, and I don't dare reckon too close or I might return to a time earlier than that of my departure, which would be very embarrassing."

He waved one hand jauntily, and with the other shifted a lever on the dashboard. A buzzing, as of a thousand bees, ensued.

Then slowly, unreally—and *this* really was unreal, as unreal as a similar scene in a science-fiction film—the machine rose directly upward, and hung a foot or two above the level of the roof. No swaying and bobbing in the air like a dirigible balloon but rather a straight effortless movement and then a halt. Just like an elevator, but without any suspending ropes above it or supporting push-rods beneath it.

Barney waved again to me, and shifted another lever. That is, I suppose he shifted it. I saw him reach for it—and then the machine was gone. It didn't *go*, it didn't even *fade;* it just merely was no longer there!

After rubbing my eyes and peering up into the sky in all directions, I staggered downstairs to Barney's rooms, wondering, as the situation gradually dawned on me, that I had taken it all so calmly.

A FEW minutes later the bell rang and a large athletically built man pushed his way in. His skin was tanned and his features fine and aristocratic.

"Oh!" he said.

"I'm a friend of Mr. Baker's," I explained. "He's out just now—won't be back for about half an hour. Anything I can do for you?"

He held out one slender carefully groomed hand.

"I'm Mr. Sears, Baker's employer."

"I've heard Mr. Baker mention you. Won't you wait?"

Immediately I was sorry. What if this meticulously clad gentleman were to see Barney in his Daniel Boone costume?

But fortunately Sears appeared to be in a hurry.

"If you don't mind, just tell Baker that I said that we've looked up the law on the Martin case—*Martin.* Can you remember that?—and we find that, in spite of the lapse of time, there are certain disabilities which tack. Do you get that?"

"I get the *words,*" was my meek answer.

"Well anyway, if he can prove that Ephraim Martin outlived his brother Isaac, we can win the lawsuit. I thought that this news would encourage him in his search for a certain diary. He'll know what I mean. Well, good-by, Mr.—I didn't quite catch your name?"

"It's no matter," I mumbled.

"Well, good-by, Mr. Snomatter. Thank you very much for your courtesy."

He held out his slender hand again. I took it gingerly for an instant. He breezed out.

I fell to musing upon the utter lack of perspective of the legal profession. Here were Barney Baker and his boss, all het up about a mere lawsuit, and entirely oblivious of the fact that scientific history was being made this very night . . .

The door opened, and Barney staggered in. His beautiful leather costume was mussed and soiled, his coonskin cap was gone, his face was haggard and covered with a day's growth of beard, there was a bleeding scar across one temple, and his eyes were feverish and bloodshot.

"Water!" he sank into a chair.

I hurriedly brought him a glassful.

"Did you get the diary?" I demanded.

"What does it matter!"

He reached into one of the pockets of his leather jacket, pulled out a small, neat, black leather-bound book held closed by an ivory lead-tipped stylus along one edge, and flung it on the table with a disgusted gesture. Then his jaw dropped, and he slumped dejectedly.

"Mr. Sears was in while you were back in 1776," I commented with forced casualness, hoping thereby to calm my friend. "He said to tell you something about someone getting a disability on account of some tacks. Well, anyway, he said to tell you that, if Isaac died ahead of Ephraim, you win the lawsuit."

Interest flickered in Barney's gray eyes for a brief instant.

"Isaac *did* die first," he declared. "I *saw* him die! But what do I care about the Martin family, or Mr. Sears, or any lawsuit! *She's* dead! Oh, my God!"

HE clenched his fists and his face became even more haggard.

"Who's dead?"

"Caroline. Caroline Prescott. The most beautiful girl in the world. And I could have saved her! The trouble with me is, I always get my bright ideas after the case is over."

There he was, talking just like a lawyer!

Well, it might do him good to share his troubles with someone, so I encouraged him to talk.

"I'll start at the beginning," he said, sitting up a little straighter and facing me. "When I left you, I zipped back through time to the tail end of 1776, and then slowed down slower and slower. Below me I saw the charred ruins of Fort Randolph. Still slower; smoke, then flames, then the fort intact. So I stopped backtracking through time, and hung in space above the fort. There was no sign of the besieging British and Indians, and I saw only a scant dozen of the besieged—colonists in homespun clothing or leather suits like my own.

"Four of them were standing watch at the four corners of the palisade, and the remainder were resting on the platform which ran around on the inside of the pilings. One of these fellows was busily writing something in a book which he held in his lap."

Barney smiled a thin fleeting smile at the recollection of this scene, and then continued:

"No one was looking either up in the air or toward the interior of the fort, so I was able to ease my time-machine soundlessly down between two of the log buildings, without being noticed. I got out and was walking quietly around the corner of one of these shacks, when I ran plumb into a girl!"

He shuddered and his eyes suddenly went stark with pain.

"Was she as horrible as all that?" I asked.

"Horrible? No such thing! She was beautiful—the most beautiful girl I have ever seen. The *only* beautiful girl I have ever seen! Soft dark wavy hair. Clear blue eyes. Patrician features. Delicately rounded figure. Waist slim and flat, and yet supple and wholly free of any restraining garment. She was wearing a Priscilla Alden costume of gray and white."

Barney's eyes glowed reminiscently. Then he shuddered again, as he added,

"But she's dead now! I *could* have saved her, and I didn't."

I tried to be sympathetically soothing, but my natural inclination to wisecrack got the better of me, and so I dryly commented,

"Try to remember, Barney, that this

girl hasn't just now died. She was killed more than one hundred and sixty years ago, in the siege of Fort Randolph."

"So far as I'm concerned," my young friend dully replied, "she died less than a hour ago. But to go on with my story, for I suppose you are entitled to hear it. As we collided the girl let out a shriek, and two of the men came running. Jammed their muskets into my ribs, and asked me who I was and whence I came.

"This took me quite by surprise. I had imagined that time-traveling would carry me back merely as a sort of observer, and yet there I was right in the middle of things, with real guns stuck into my ribs.

"'IT'S all right,'" I stammered. "'I'm a Colonial.'

"'Your speech betrayeth you,' one of the two men commented. 'You are English.' He had a hunched lanky figure, a cadaverous unshaven face, and bleary eyes. Several of his front teeth were missing.

"'Heavens, no! Bostonian,' I said. 'And I'm no Tory. I'm Bernard Baker, a trapper. I happened to be wandering past here, and heard the noise, and thought I'd drop in and see what all the shooting is about.'

"'Surely you jest. Where are your traps and your long carbine?'

"'My traps are all set. And—' I was just about to say that I carried a much more dangerous weapon than a dozen of their medieval guns; but some hunch stayed my tongue, and instead I finished with, 'My long carbine is at my camp over by the river.'

"'How did you enter this fort without being seen?' asked the second man, a jolly fat fellow.

"'Over the wall. Your sentries should keep better watch.'

"Just then a third man came running around the corner where I had left my time-machine, his face blank, his eyes staring.

"'An engine!' he gasped, beckoning. Prodding me with their rifles, my two captors forced me to where my machine stood. The girl followed.

"Here was my chance. *'That* is what I came in,' I said. 'It is a kind of cart to travel around in. It can scale walls. Let me get into it and I will show you.'

"'And let you return to your allies, the British and Indians? No! We shall hold you prisoner and destroy your engine.'

"Alarmed, I cried, 'No! No! If you touch it, it will explode.'

"For reply, one of the men raised his long carbine, and blazed away at my precious time-machine. And—and—it vanished!"

Barney paused in his narration, and something of the old-time twinkle appeared in his gray eyes.

"How could you ever get back to now, without your machine?" I gasped.

"That's what I wondered at the time," Barney enigmatically answered. "I don't know who was the more horrified at the vanishing—the Colonials or I.

"'Witchcraft! Witchcraft!' they cried, as they hustled me roughly into one of the log huts and clapped handcuffs onto my wrists, pinioning them behind me. Then they went out, locking the door. Oh, the fools! Here was I, anxious to help them, especially as I was now marooned in their era. Here were they short-handed. And yet the idiots had locked me up.

"But at least the handcuffs didn't have me buffaloed. My fraternity at college had had some old Colonial handcuffs for use in initiations, and I knew how to jar the spring loose. So in a few minutes my hands were free.

"Just then I heard the door lock grate, and I hastily thrust my hands behind me. The door opened, and the girl came in, bearing a rough earthen bowl from which steam was rising.

"She smiled and said, 'Master Baker, wouldst have some savory stew?' Her voice was as sweet as her face and figure.

" 'You betcha!' I answered. 'I mean, I wouldst.'

"She dimpled. 'I hope that thou art to be trusted, Master Baker. Our men ought not to rebuff aid from whatever quarter.'

" 'You took the words right out of my mouth,' I said.

" 'Thou hast a quaint manner of speech, Master Baker. But come, let me feed thee thy broth, for thy hands are pinioned.'

"STILL pretending that this was so, I let her feed me with a big pewter spoon; and we had a lot of fun, and got well acquainted. Her name was Caroline Prescott, and she had lived with an uncle on a farm nearby, until Indian raids had forced them to seek shelter in Fort Randolph."

Barney swept one hand dramatically down the front of his leather jacket.

"Some of these stains are soup-stains. And some are blood.

"Well, anyway, when the feeding-game was all over, I pulled my hands around from behind me, and showed her that they were free.

"She gasped, and fell back a pace, raising one slim-fingered hand to her throat.

" 'Then thou art truly a sorcerer!' she cried.

" 'Nonsense,' I replied. 'Look!' I snapped the manacles back onto one wrist, and then showed her how I could jar them loose again.

" 'And that engine of mine,' I added, 'has just as regular an explanation, if that rat-faced fellow hadn't—'

" 'Thou mean'st Isaac?'

" 'Not Isaac *Martin*, by any chance?' I asked, completely diverted from my former line of talk.

" 'Why, yes. Why?'

" 'Because, to tell you the truth, I came here looking for him and his brother Ephraim.'

" 'Both survive.'

"Just then we heard a shot and a shout from the walls outside. 'The redskins! They come!' "

Barney mopped his brow at the recollection, then went on.

"Caroline turned eager pleading eyes toward me. 'Wilt fight for us?'

" 'Of course!' I cried. 'What are we waiting for?' I brushed past her, and set out on a run toward the sounds. Caroline trailed after me.

"Most of the men had congregated on the platform along one wall of the fort, potting away with their long carbines. Below them stood a half dozen or so of women, reloading guns and handing them up to the men. Other guns I could hear beyond the wall, and arrows kept zipping over, close to the top of the palisade.

"As I stared, one arrow with a flaming mass of waste or moss at its tip, arched across and imbedded itself in the log wall of one of the interior buildings beside me. Caroline rushed to it, yanked it out, and doused it in the dirt of the yard.

"I reached beneath my left armpit, drew my .45, and scanned the parapet to see where I could be of the most use. Leering down at me, his back momentarily toward the foe, I saw the pinch-faced Isaac Martin.

" 'Aha!' he cried. 'The renegade!' He raised his flintlock menacingly.

" 'Drop it, Isaac!' I shouted, leveling my pistol at him. A weird thought

flashed through my mind: perhaps, to save my own life, I might have to settle the title question myself, and in the way my firm wanted it settled.

" 'So you *are* a renegade, attacking us from within, eh?' Isaac jeered.

"I give the fellow credit for plenty of courage, for he brought his piece smartly to his shoulder, although I already had the drop on him. But perhaps he underestimated the power of my puny-appearing weapon. It was my life or his.

"And yet, if I were to blast him down, that very act would prove me an enemy. Funny, I didn't worry as much about my own fate as I worried about the colonists passing up the aid which I could give them.

"Caroline shrieked, 'Don't, Isaac, don't! Master Baker is a friend!'

"He flashed a glance of scorn down on her, as his lips curled over the words,

" 'So thou too, Mistress Prescott, art—'

"HE coughed, his eyes went wide, he clapped one hand to his throat, and pitched forward off the platform, an Indian arrow neatly impaled through his neck from rear to front. Caroline and one of the other women carried him, choking and coughing into one of the log buildings, his staring eyes glaring balefully at me as he went.

"There was a crude ladder of two saplings and some slabs, leaning against the platform near where Isaac Martin had been standing. I hurried up it, and took my place among the other defenders.

"The two men nearest me eyed me with instant suspicion, but seeing that I was not menacing them, they turned their attention back to the foe outside the wall. I myself then peered over the top.

"Not over two hundred yards away, on the crest of a little knoll, stood a score of red-coated British grenadiers and several hundred painted savages, naked to the waist. With a good Army rifle, I could have picked them off one by one with never a miss.

"I particularly itched to put a slug through their leader, a fellow in a knee-length, lace-trimmed blue coat and three-cornered hat, who seemed to be haranguing them vehemently."

Barney's fists clenched at the recollection.

"The long carbine of the man on my right spoke, and an Indian leapt clawing in air from behind a bush not a hundred feet away from us. This drew my attention nearer home than the group on the knoll, and I now noted sleek copper forms crawling here and there, rushing from one protecting hollow to another, skirmishers ever drawing closer and closer to us. The terrain was fairly swarming with them.

"Something poked me in the leg. I glanced around and down. A round-faced blousy woman was passing a loaded flintlock up to me. I shook my head, pointed to my own little weapon, as yet unused, and turned to face the enemy again.

"The Indians on the knoll were now charging forward in a body, emitting shrill yells, and brandishing their hatchets. Some were carrying ladders. As they came on, other redskins rose from their cover and joined the advance.

"Behind them, the British soldiers deployed into a thin red line and marched slowly, precisely toward us, their muskets at the carry, their commander on one extreme flank, doubtless so as to remain out of range as long as possible.

"The British held their fire, and the few arrows which came from their savage allies were not very well aimed; so our men stood up quite exposed and let them have it."

Barney's lips tensed at the memory.

"Figuring that a .45 Colt is at least as accurate and effective as a flint-lock musket at equal range, I blazed away too. Indian after Indian fell, but still the horde came on, until the soldiers arrived within range, and then they opened fire. We had to duck, and then our own casualties began.

"Volley after volley raked the top of the palisade; and under cover of this fire, the Indians succeeded in rearing several of their ladders against our wall. Our women brought out steaming pots and kettles and caldrons of water. Crouching low on the platform, we took these utensils, and dumped them over wherever a ladder top appeared.

"Shrieks and howls from below were our reward, but at length our supply of scalding water was exhausted. Then some of the men counseled our withdrawing to the tower building in the center of the enclosure.

" 'Go ahead,' I advised, 'but I have a hunch I can do more good by staying right here. I'll try to cover your retreat.'

" 'You're a brave fool, Trapper Baker,' asserted the jolly fat fellow who had been one of my two original captors, 'but you've killed enough of the redskins with that formidable popgun of yours, so that we know you are on our side. In case I don't see you again, I apologize for having mistrusted you.'

"GRINNING jovially, he waved one hamlike hand," Barney went on. "Then he and the rest of the men scrambled down off the wall, and ran for the shelter of the central building. I continued to crouch low on the platform.

"A turkey feather, followed by a brushlike scalplock, shaved skull and beady black eyes, appeared cautiously above the edge of the palings. The eyes scanned the interior of the fort, not seeing me who crouched just below their line of vision. My .45 barked, knocking his head back, just as though hit by a hammer.

"Encouraged by this success, I leaped to my feet, thrust my head and right arm over the top of the parapet and blazed away at those below, clearing the ladder of three more climbing Indians. Other ladders had been raised against the wall on each side of me—I cleared them too. My coonskin cap was snatched off—I saw it fall to the ground to my left, impaled by an arrow."

"So that's what became of it!" I interrupted.

Barney brushed me aside with an annoyed gesture, and continued.

"Yes. So I wheeled to the right and potted the redskin who had evidently winged the arrow at me. Then I ducked behind the palings, and looked back toward the interior of the fort.

" 'Come on out, fellows!' I shouted. 'We've got 'em on the run!'

"My fat friend, and the man whom I had seen writing, were the first to respond. The others followed. I peered cautiously over the top. Spurred on by the blue-coated British officer, the Indians and grenadiers were charging forward again to man their deserted ladders. We let them have it, and once more they retreated.

"As they ran, we reached over and hauled their scaling-ladders up and into the fort. Then, as the women below us reloaded the muskets, we sat down on the platform to rest.

"The fellow with the book, took it out of one of the pockets of his jacket, and began laboriously writing in it. He was slim and wiry, with engaging aquiline features, yet bearing a distinct family resemblance to the cadaverous, toothless cuss who had tried to kill me earlier in the fight.

" 'Dr. Livingstone, I presume?' said I, holding out my hand.

" 'Eh?' he asked, looking up from his writing.

" 'Beg pardon. I meant: Ephraim Martin?'

" 'You know me?'

" 'I recognized you by your diary. They're quite famous, you know.'

" 'I didn't know.'

"I let it go at that. 'May I have the diary, if you get bumped off? Er—I mean, if you get killed?'

" 'If thou wilt take it to my sister Anne in Albany.'

"I nodded. Might as well promise that as anything, for how was I to get the diary back to my boss with my time-machine gone? Ephraim Martin resumed writing. His sister Anne was dead these one hundred and sixty years, but of course he could not know that, poor fellow.

" 'Master Baker!' A sweet voice below was calling up to me. I clambered down, and took Caroline Prescott's two outstretched hands in mine. We looked into each other's eyes. And, Ralph, it was just as though we were alone together in the yard of that fort!"

BARNEY'S face was grim and haggard, his bloodshot eyes appealing, as he sat there telling me his story, trying to get me to understand what had happened to him. There was a long silence, steeped with sadness.

"And then?" I coached. His eyes narrowed.

"And then the Indians came over the rear wall. Their onslaught was so sudden, so unexpected, that we had no time to gain the comparative safety of the inner buildings. Our men jumped down off the platform. We raced for the cover of the wall of the central tower. Here, with the women between us, we formed two groups, one at each end of the wall, firing around the corner at the enemy who now swarmed within the fort.

"My fat friend was the first one of our group to go, an arrow through his chest. He held up one hand to me, and coughed out the words:

" 'Keep—on—Trapper!'

"Ephraim Martin was the next one hit. As he pitched forward, he reached in his pocket for the little black leather book. I took it, and blasted his assailant with my .45 a moment later.

"Then the enemy came over the parapet which we had quitted. We stood with our backs to the wall of the tower building, with the women behind us, but the grenadiers with their bayonets were too much for us. The Colonials around me, their ammunition exhausted, were now dubbing with their muskets in a heroic last stand. I alone was still able to keep on shooting; but even I was down to my next to last clip.

"I heard Caroline shriek, 'Master Baker!' A leering savage had her by the throat. I couldn't fire without endangering her.

"Then the blue-coated British officer came elbowing his way through the mêlée, his eyes gleaming appraisingly.

" 'She's mine,' he shouted, clapping one lace-wristed hand on the Indian's shoulder.

"The Indian twisted his head around to see who was interfering with his savage amours. I brushed aside a bayonet thrust by one of the grenadiers, and blasted the Indian's face with a .45 slug.

" 'She's *not* yours either!' I shouted at the officer. I had one cartridge left in my clip.

"The officer raised his flint-lock pistol. We both fired.

"The next thing that I knew, I came dizzily to my senses, lying on the ground, with several bodies on top of me. My mind cleared with a jerk, and

I glanced cautiously around, without moving my head.

"The firing had ceased. The enclosure was deserted, except for the dead. British soldiers were patrolling the walls. Caroline—my Caroline—lay dead beside me, her blue eyes staring sightlessly open, her glossy dark hair gone. Gone! Just a bloody expanse of skull where it had been. Oh, my God! She'd been scalped!" Barney cried.

There was nothing that I could say.

Finally, grimly, Barney resumed: "I was filled with blind rage. Flinging off the bodies — one Indian and one Britisher — which pinned me down, I staggered to my feet and fitted my last remaining clip into my automatic. One of the guards on the parapet saw me, and raised his musket. I let him have it, and he pitched headlong into the enclosure.

"I DUCKED around the corner of the tower building. Smoke was beginning to pour out of its windows, and to seep out through the cracks between its logs. A purpose was gradually forming in my mind—to find that blue-coated British officer and make him pay for Caroline's death, before one of his men got me. For, of course, there was no escape, either through space or through time.

"And then I saw my time-machine!"

"What!" I exclaimed.

"Yes," said Barney, something of his customary impishness reappearing for an instant in his pain-drenched eyes.

"But how?"

"Evidently the shot which one of my captors had fired at it, causing it to vanish, had nicked—pushed down—a control lever, thus merely sending it forward a few hours. Time had now caught up with it, and there it was.

"Self-preservation is nature's first law, and Caroline was beyond all aid. I staggered over to the machine and crawled into the driver's seat. A shout rose behind me. Old Bluecoat and five of his Redcoats were advancing toward me. With a grim grin I raised my pistol, and made every one of my remaining shots pay.

"I saved my last slug for the officer. As he went down, I swung the control-lever—and here I am, back in our time. But I might just as well be dead—with Caroline."

His head drooped forlornly and he was the picture of dejection.

"Barney, old man, try to remember that this girl died more than a century and a quarter before your birth."

"She did not! It was only a few hours ago! But," he added fiercely, with a gleam in his gray eyes, "so did the British officer who was responsible for it all! Think of it! Stirring up those painted savages to massacre his own fellow-countrymen! For, after all, the Colonists were Englishmen, fighting for their constitutional rights as such."

"Spoken like a lawyer!" I wise-cracked. "Well what are you going to do about it?"

"What am I— Say! Why not!" He straighened up in his chair, and a smile suffused his face for an instant. Then his eyes and lips narrowed, and his square jaw protruded belligerently.

"Why not!" Barney Baker demanded.

"Why not what?"

"Go back there again to 1776, and this time do things right. Go back to just before Caroline's death, and this time rescue her. Why not!"

I gasped. Then I objected, "Although I don't know very much about time-traveling—does anyone?—it does seem to me that there ought to be a rule against the same fellow traveling back twice to the same time. You yourself stated earlier this evening that it might

prove embarrassing, if you were to return from your 1776 jaunt to a time earlier than the time of your departure."

"I wonder."

"But, man, you'd find yourself already there, back in Fort Randolph!"

He smiled his good old crinkly-eyed smile.

"So what! Perhaps the two of us could rescue Caroline, where one of us before proved insufficient. We may even be able to lick the British and the Indians."

I SHOOK my head. "You can't change history. As Omar Khayyam said:

> 'The Moving Finger writes and, having writ
> Moves on: Nor all your Piety nor Wit
> Shall lure it back to cancel half a Line,
> Nor all your Tears wash out a Word of it.'

"Time-traveling itself is impossible. Yet I've already time-traveled, and I've already altered history—a little. Think of all the British and Indians I killed! So I'm going back. I'm going back *right now!*"

He got up resolutely from his chair, his gray eyes shining with determination.

"But why hurry?" I objected. "Spend a few days in preparation. No matter how long you delay you can still arrive in Fort Randolph just as early."

My own grasp on the technique of time-traveling was beginning to astonish me, and fill me with pride.

But Barney shook his shaggy head.

"Can't wait," he clipped. "Can't stand the strain of waiting. Must see Caroline again—at once—alive!"

"Just a minute," said I. "How about that diary? Do you want me to turn it over to Mr. Sears, if—er—you shouldn't return?"

"That's so," he mused. "I do owe that much to the firm."

Stepping to the phone, he dialed a number.

"Hello! That you, Steve? This is Barney Baker. I want you to come right over . . . I don't care if you *are* in bed! Didn't I save you that rap? Okay, then. Pronto!"

"Who's Steve?" I asked.

"He's a forger, best in New York. I got him acquitted of a job he didn't do. Plenty of jobs he *did* do that they never pinned onto him; and then, as is typical of crime prosecutions, they nearly got him when he was innocent. He's been going straight ever since—quite an expert on questioned documents. We've got to make this Ephraim Martin diary look the age it really is. Steve Annen can do it, if anyone can."

"O-ho! said I. "So Steve is to go crooked again."

"Certainly not!" There was pain of insulted legal ethics in Barney's gray eyes. "This is to be the 'truthification,' rather than the falsification, of a document."

I grimaced, and changed the subject. "Better shave and wash up, or Caroline won't love you."

Barney Baker took my advice. While he splashed around in the bathroom, I opened Ephraim Martin's diary, and perused his quaint, stilted account of his last hours on Earth: September 1, 1776. With interest I noted his matter-of-fact mention that:

"Whereupon an arrow transfixed ye neck of my deare bro. Isaac fro ye reare, thereby caus'g his soon demise."

Was there brotherly malice in that "fro ye reare"? Well, anyway this entry was most fortunate for the real estate clients of Cabot, Sears, O'Brien & Gardella.

Two other entries I remember: (1)

"A trapper yclept Baker hath joyned us. He hath a most potent weapon." (2) "It appeareth that Mistress Prescott doth like ye trapper. And he her."

Truly history hath been made by Trapper Baker. I find myself too lapsing into Colonial vernacular.

BARNEY was all cleaned up, including his gun, his pockets were restocked with every remaining ammunition clip in the house, by the time that Annen arrived—a little, swarthy, ratlike fellow.

He readily enough agreed to age the diary, and to plant it among some of the ancient tomes in an Albany second-hand book store, where I—after some urging—agreed to find it, buy it, and turn it over to Mr. Sears, claiming that I had found it on a tip from Barney.

Steve Annen departed. And so did Barney—a flight upward into space, and then *poof!* Just as before.

And, as before, I went down into Barney's study to wait.

This time I was positive that I had seen the last of my young friend. It would be too much luck for him twice to survive the same Indian massacre.

I picked up a mystery novel by Elliot Paul and tried to read, but couldn't keep my mind on the book, for thinking of Barney and trying to imagine what the *two* of him were doing together back in Fort Randolph in 1776. Bizarre thought! I turned on the radio—but no stations were operating at that hour of the night.

Finally I dozed off.

A hand was laid on my shoulder. I awoke with a start, imagining that the Indians had taken me captive, but it was only my friend Barney Baker, returned.

Not crushed and despairing as before, but grim, determined and hopping mad. His firm jaw was set, his lips a thin line, his tufted eyebrows twitched, and his gray eyes flashed ominously.

"Well, where's Caroline?" I asked, in an attempt at levity.

"She's alive, thank God! But she's gone with that # ! * ! $!"

"With *who?*"

"With the other me!" He sank into a chair, muttering and growling.

"Explain yourself, man."

"There's not much to explain. What I ought to have done was to have arrived at Fort Randolph several days before the siege. Then I could have kidnaped the girl before that *other me* arrived on the scene. You know—before I got there the first time, the time that I told you about on my first return. It's awfully hard to explain."

"I get the general drift. Well, why didn't you?"

He spat bitterly. "Because I always have my best ideas just after the case is over." Once more he lapsed into legalisms.

Continuing, he said, "Instead I landed just when Trapper Baker and the Colonists were driving back that first Indian attempt to scale the walls. Remember?"

I nodded.

He went on. "I climbed up beside myself, and helped materially to speed the victory. And wasn't the other Barney Baker surprised, when I explained to him who I was, during a lull in the fighting!

"But, being a time-traveler like myself he soon caught on readily enough. And he was much relieved when I told him that his supposedly lost time-machine had merely gone forward in time for a few hours, and would soon reappear. Then I told him what would happen to Caroline, if we did not rescue her immediately.

" 'We can all three go in my machine,' I said.

"HE readily agreed. 'You stay here on the wall, so our friends won't think I'm quitting. I'll go look for Caroline.' He glanced around; she was not in the enclosure. 'She must be gone for some more powder and ball. When I find her, I'll shout, and then you break and run for the machine.'

"He slid down from the platform, and ran off toward the powder magazine. I turned to the fighting again.

"When the Indians finally broke and ran, it occurred to me that, for the sake of my reputation with these my friends and allies, I had better pave the way for my departure.

" 'I'm hit!' I gasped. My fat friend —who'd been killed on my first visit— looked anxiously around. 'Here is my pistol and the rest of my ammunition,' I said. 'I'll show you how to use it. Then you can carry on when I'm— gone.'

"A few minutes of instruction, and I saw that he could be depended on to shoot the weapon until the clips were all exhausted. Feigning dizziness, I clambered down into the enclosure; then glanced over toward my machine. The other me was already in the seat, Caroline was beside him, and he hadn't hollered as promised.

" 'Hey wait!' I shouted, running toward them with a panicky feeling.

"For reply, he waved me a jaunty farewell. Caroline stared at me in surprise; then back at him. He reached for the levers. And the machine vanished! There was nothing now for me to do, but to stay and fight—until the machine in which I'd made my second trip reappeared.

"My automatic was now being ably used in other hands. I was no longer needed.

"Well, to make a long story short, I warned them of the attack from the rear which had taken us by surprise the time before. And I myself shot the blue-coated officer as he was coming over the wall—shot him with a musket. Then my machine showed up, and here I am. I had hoped to find the other Barney Baker here ahead of me—with Caroline. But no such luck."

"What do you plan now?" I asked.

"I shall stock up my machine and go hunt for her. Some day I shall find her, and when that day comes, there will be one less Barney Baker, as by rights there ought to be. I have all eternity to hunt through, and only the few remaining finite years of my life to do it in."

The next day Barney Baker started off. I have never seen him again.

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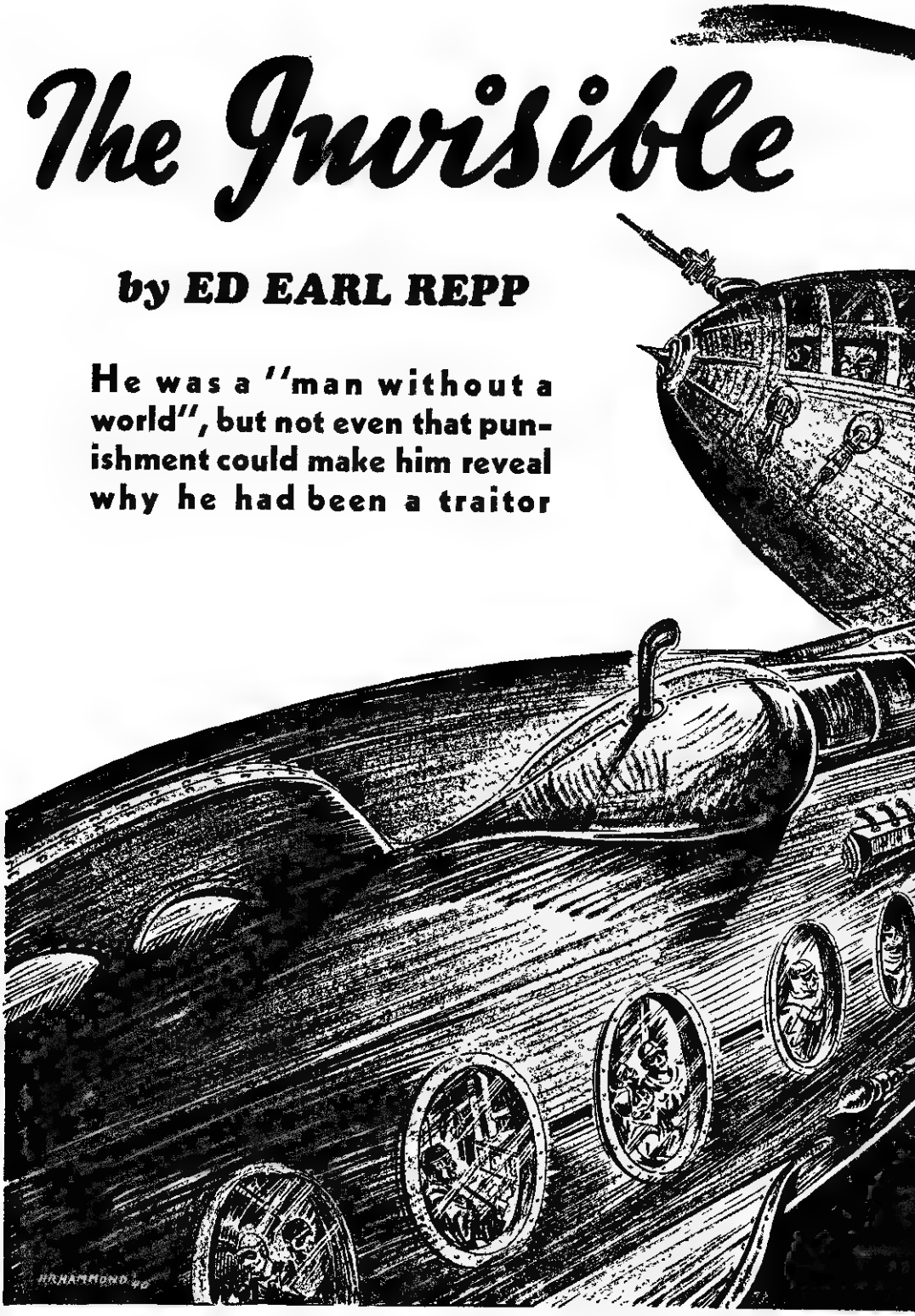

We watched tensely as the oxy-flame bit into the *Vengeance* hull

World

FIRST Mate Ian Patrick's thoughtful advance down the corridor stopped before the door of the radio room. Without knocking, he went into the vibrant atmosphere of buzzing transformers and reeking ozone. Sparks, chief operator of the liner *Oracle,* was hunched over the desk with ear crooked to the dim cracklings of an amplifier.

Patrick dropped a thin sheaf of papers before him.

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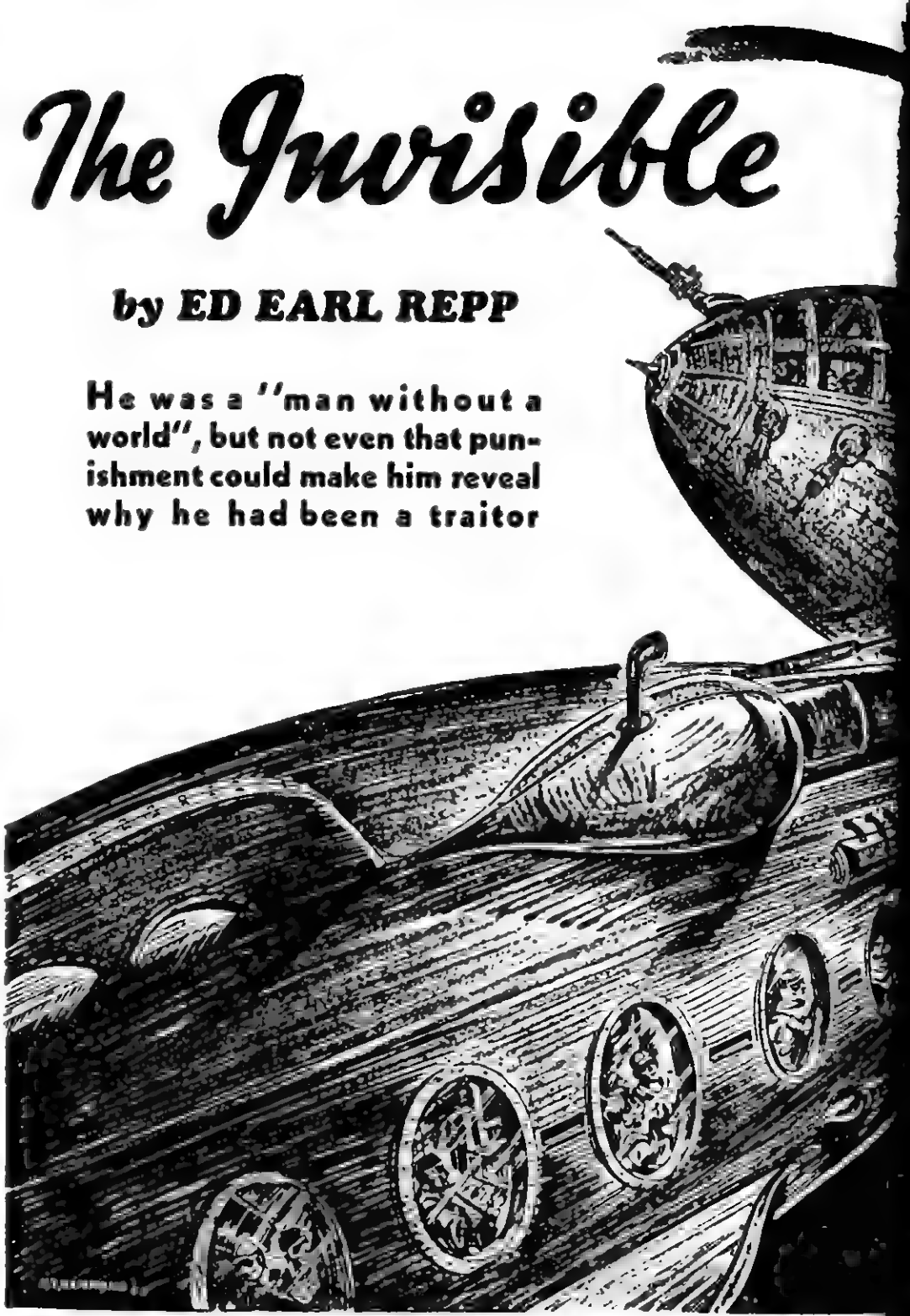

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palm over the unsullied surface of his onion-slick scalp, a frequent gesture since commencing the use of a patent hair elixir. The first mate's employment of the nickname "Curly" dated back to the first bottle.

Sparks scowled at him. "Quiet!" he hissed. "Picked up a news broadcast. Vickers is at it again!"

Patrick's preoccupied air left him. He caught a breath and pulled up a chair to join Sparks at the loudspeaker. A news broadcast was something unusual out here in the void, millions of miles from Earth. With universal conditions as they were at the moment, Sparks spent most of his time trying to pick up news from war-harried Earth and Mars.

"—Vickers' message came with customary suddenness," rasped the dim voice from the speaker. "Just five days after the Allied Worlds High Command despatched the new and deadly Kuhlon guns by freight ship to the fleet off Jupiter, Karl Vickers radioed that his Plutonian hordes would descend on helpless Mars and Earth within a fortnight.

"This may mean almost anything, since his successful attack on Venus came within three days of a similar warning to that planet last month. If Vickers succeeds in slipping through the cordon before the Kuhlon weapons are installed in the ships, the situation will indeed be grave for the Allied planets. Vickers' disintegrators, while inferior to the new Kuhlon gun, are vastly more deadly than the weapons now in use aboard the fleet ships.

"But Commander Yerkes has radioed to Mars and Earth the assurance that Vickers is still somewhere within the noose of warships Yerkes has thrown around Vickers' hideout off Jupiter. Just where that hideout is, no one can say. Yerkes has narrowed the hunt down to a comparatively small territory; but since no asteroids are known to exist within that sphere, Vickers would still seem to hold his trump card —that is, complete mystery as to his whereabouts . . ."

The voice faded out, and none of Sparks' tuning would recover it. Sparks shut off the receiver and wagged his head.

"Bad business," he growled. "Where the devil can that butcher be hiding? If they could only get him in their sights just once—"

"I've got a sneaking hunch they don't much want to find him anyway," Patrick mused. "Vickers may only have five or six ships with him, but any one of them is worth twenty of ours. Compared to his disintegrators, our guns are like water-pistols."

"But if the Kuhlon guns reach the fleets in time!" Sparks reminded him fervently. "The freighter that's carrying them must be almost there by this time. The High Command hasn't announced what ship it is, but it must be a fast one—not a space tramp. Let's see—they said the guns were shipped five days ago. That would put the ship—"

Patrick sat up straight. "Right about where we are!" he exclaimed. "We're only four and a half days out ourselves."

A grin claimed Sparks' thick lips. "Hell, how do you know *we* aren't carrying the guns! Our course takes us darned close to the fleet!"

Ian Patrick chuckled. "If I hadn't supervised the loading and sealing of the holds myself, I might believe the skipper did have something up his sleeve. But all we're carrying is baggage and a few scientific instruments."

SPARKS looked a little disappointed, and he started to pick up the notes Patrick had tossed on the desk. Then,

with a scowl, he remembered something. Digging a folded paper from his vest pocket, he gave it to Patrick with somewhat the air of a man who handles a poisonous insect.

"Nathan asked me to give you this," he grunted. "Wants to see you, I suppose. Dammit, Ian, you're taking a risk every time you talk to that guy!"

Patrick flung the note into a corner.

"Do you think I don't know it?" he raged, his temper boiling up without warning. "What's he trying to do—get me in trouble? If the skipper knew I've been talking to that old coot, it'd be the rocket rooms for First Mate Patrick from now on! And at a time like this!"

"Where you made your mistake," Sparks offered, "was in talking to Jared Nathan the first time."

PATRICK jammed his hands in his pockets.

"I can see that now. He's hiding around every corner these days, as hungry for conversation as a starving man for food. Still—somehow I can't help feel sorry for him. Fifteen years aboard this ship! Not allowed to talk to a soul as long as he lives. Hasn't touched solid ground or seen an inhabited world since they put him on board! Not that he didn't deserve it," he finished grimly.

Sparks snapped on the transmitter and twirled dials.

"I can see him hugging his sides in his cabin right now!" he gritted. "Him—the man that turned that mad dog, Vickers, loose on the world again after he was stopped!"

Ian Patrick had no answer for that. Bitterness brimmed in his dark eyes, drew harsh lines in his face. He was thinking of Karl Vickers; of Jared Nathan, who had released Vickers fifteen years ago after his bloody dream of power had broken and a tribunal had sentenced him to death on Planetoid 53.

Karl Vickers was the butcher who had followed in the wake of the warmongers of Europe. Possessed of boundless craft and hunger for power, he had the bloodlust of a savage, the cruelty of an Inquisitioner. In a two-year war, he swept his Central European army over the world, conquering every nation on the globe with his new, resistless weapons. His purges of conquered ruling bodies were carnivals of lust and cruelty. With his blood thirst unsated, he descended on Venus and charged across the little world, murdering five million souls in the process.

It was on Mars that the remnant of Earth's armies joined the Martian legions to defeat him in the ghastliest battle mankind had ever witnessed. Vickers lived to be sentenced to slow death on Planetoid 53. On that bare chunk of rock, he and his war ministers were to be abandoned with a small store of food and a limited quantity of oxygen in their space suits. Death would be the slow, maddening kind Vickers deserved.

But Fate had other plans for him.

Fate, in the form of a traitor, Jared Nathan, rear admiral in the Terrestrial Fleet, had set the condemned men free in a life-ship before the planetoid was reached! After that, Nathan gave himself up to his own men—without a word as to his reason for the act!

Jared Nathan had paid—was still paying—for his treachery. But Karl Vickers was loose on the universe again. He was back from Pluto, where he had amassed the greatest killing machine in history. Venus had gone down under a series of raids. The strange, disk-like ships, led by Vickers' black flagship, *Vengeance*, had brought mass murder to the peaceful planet. Vickers left that planet in the hands of a few thousand of his savage Plutonian fighters, and now had his ships stationed about Mars and Earth awaiting his word to attack.

For the Tri-World allies the future was a black and terrifying one.

Ian Patrick got up, as Sparks' fingers began tapping out the ship's location to Central Navigation.

"Well, I'll see you later," he muttered. "I'm due on the bridge in ten minutes."

Leaving the room, he headed forward. His way took him past Jared Nathan's door, but he did not slacken his pace as he approached it. But as Patrick came even with the door, it flew open and Jared Nathan slipped into the portal!

THE dim light of the corridor showed a man of middle height standing there, gray of head and sallow of skin, a lonely-looking figure with the shadows of hell in his eyes. Dissipation had stamped its mark on him. Jared Nathan had few pleasures these days, and drinking was chiefest of them.

He stepped forward then and signalled to Patrick.

"Thank God you came!" he breathed. "I was afraid you might go by."

"As a matter of fact," cut in Patrick coldly, "I intended to. These conversations have got to stop, Nathan. It would mean my discharge if I got caught. The risk's not worth it."

"I know." Nathan nodded bitterly. "But—this once! You've got to listen to me, Patrick. I want you to throw the *Oracle* off her course tonight!"

Patrick was stunned. While he was trying to assimilate the audacious words, the traitor drew him into his untidy little cabin and shut the door.

"Throw her off her course!" Patrick gasped finally. "Are you crazy, Nathan?"

"Far from it. If anyone's out of his mind, it's Captain Baldwin. This ship is rushing into danger and apparently I'm the only one who knows it! I'm calling on you to do something about it. All I ask is that you cut in around Planetoid 27 on the outer side, instead of passing between it and the sun. Then you can go back on the regular course."

Nathan's bleary eyes searched the young officer's face. With his seedy old blue suit and dissipation-rotted features, he was not an object to inspire trust in a man of Ian Patrick's responsibilities. Yet something in his face spoke of sincerity—and terror.

Patrick shook his head. "Do you think I'd risk jail for such a harebrained act? And at the request of you, of all people! It's no dice, Nathan. I didn't think I looked feeble-minded enough to pull a stunt like that! Understand this, once and for all, I'm through risking my stripes on your account. The next time you bother me, I'll have to report you."

But as he turned to leave the cabin, Jared Nathan flung himself before the door.

"Good God, Patrick! You don't know what you're doing!" he choked. "Karl Vickers is on Planetoid 27, waiting to pounce on us as we go by!"

"Vickers!"

The word came like an explosion from Patrick's lips, and one brown hand leaped out to seize Jared Nathan by his scrawny neck.

"If I thought you were in cahoots with that mad dog again—by the Lord, I'd kill you!"

The traitor's eyes did not flinch before the unsheathed steel of Patrick's gaze.

"For your own good," he drawled, "you'd better not kill me until I speak my piece. If Captain Baldwin wasn't such a blind fool, he'd know what I know—that Vickers means to have the load of Kuhlon guns we're carrying!"

His words had the effect on Ian Pat-

rick of a blow behind the ear.

"This ship — carrying guns!" he blinked. "You — you're drunk, Nathan!"

"Possibly," the smaller man replied dryly. "But still in good possession of my faculties. Do you mean to say you didn't know the holds were full of Kuhlons?"

"But I supervised the loading of the ship myself!" Patrick argued. "We're carrying nothing but baggage and scientific instruments."

Nathan shook his head. "I don't sleep much while we're in Earth ports, Patrick. I keep thinking about the things beyond these steel walls that I'll never see again—trees, lakes, hills. Consequently, I hear just about everything that goes on aboard ship during the night. The night before we left, I heard them unload our cargo and bring in a new one!

"It took eight hours to re-load, and the men were working fast. It doesn't take a master mind to realize we're not actually taking a bunch of fat-headed business men to a Tri-Worldly trade convention on Mars, but a load of cannon to a panicky war fleet!"

Facts swarmed through Patrick's mind and kept him dumb. There was enough logic in Nathan's words for him to catch rays of truth gleaming through his suspicion of the condemned traitor.

The ringing of a bell in the hall jarred him. He was late on the bridge; the skipper was calling him. The down-to-earth sound seemed to put Patrick back on a footing of reality. Kuhlon guns —the devil! He gave a little snort of contempt.

"It won't do, Nathan. From another man, I might believe it. Coming from you—I guess you know what I mean."

Jared Nathan watched him go through the door. He heard his footfalls hurrying up the corridor. As the sounds died away, his shoulders slumped and baffled tears swam in his eyes.

"Fool!" he cried. "You'll find out — I was right. But it will be too late then!"

CHAPTER II

The *Vengeance*

THE clammy spell that Nathan's words had left with him persisted in Ian Patrick long after he reached the bridge and sank into the pilot's chair. He wished he had had time to go below and check on the cargo—just as an additional reassurance to himself.

He tried to believe that the old ex-admiral was either a liar or twice a traitor. Both ideas rang in his mind like bad coins. Nathan had appreciated Ian Patrick's quasi-friendship and wouldn't have jeopardized it with a foolish lie. Treachery was also an improbability.

Nathan was kept from the other passengers and not allowed even to read newspapers or listen to the radio. What he knew of present tragic conditions was from Patrick's lips. The first mate of the *Vengeance* told himself Nathan was merely drunk —and tried to believe that, too.

But to his ragged nerves, the throbbing of the stern rockets was like a frightened pulse in the heart of the ship itself.

With the charts before him, Patrick kept his course on the dim guiding star out to the left of Planetoid 27. It was the sleeping period for the passengers and most of the crew, and silence walked the corridors. Patrick watched the asteroid swell like a great rock preparing to burst. The sun glistened on white-hot peaks, and shadows filled black valleys where sub-zero tempera-

tures obtained. Patrick thought of a platter-shaped pirate craft hiding in one of those valleys . . .

Almost abreast of the tiny world, the *Oracle* scarcely rocked to its slight gravitational pull. Patrick's sweaty palm drew the accelerator back to full. The asteroid flashed by them!

Planetoid 27 was safely behind, an empty threat exploded. Patrick laughed softly and thought of Jared Nathan nursing a bottle in his room while he cooked up the whole fantastic story.

"Damned old coot!" he muttered. "Had me sweating ice water!"

He threw a relieved glance back at the retreating rock. In the next moment Ian Patrick was on his feet. His face was the color of clay.

"The *Vengeance!*" he gasped. "Nathan wasn't lying. *Vickers has got us!*"

He stared in fascinated horror as the flagship curved up from below like a black discus spun into the wind. Belching jets streamed pale fire. Guns were thrusting out between the rocket tubes in the disk's rim, and while Patrick sat frozen, one of them flashed.

From somewhere he drew the strength to pivot and stab at the alarm buttons. Bells began to shrill all over the ship. Their clamor was drowned as the *Oracle* gave a sickening lurch. A resounding *clangggg!* dinned against Patrick's ears.

He grabbed at the edge of the control board and clung to it while the *Oracle* went into a dizzy pinwheel. One of the stern tubes had been hit! Patrick fumbled for the controls, fought to right the ship. By the time he got it back on an even keel, it was all over for the good ship *Oracle*.

The shadow of a black wing seemed to settle over it. Magnetic power brought it up against the flat bottom of the *Vengeance* with a smash. Seconds later, Patrick heard crisp tappings against the outer hull of the craft. Small shapes darted by the ports. Vickers' Plutonian hordes were scuttling them.

Patrick tore the short rifle from the wall and sprang through the door. From his elevated position on the foredeck, he could see the terrible confusion of the main deck. The passenger list consisted of two hundred men, but they were scurrying around yelling like ten times that many women. Junior officers were shouting for order. The senior officers, Captain Baldwin at their head, were rushing up the ladder to the bridge.

Sparks came tearing down the hall from the radio room, with his bald forehead and pate wrinkled clear down to his rear collar button.

"Ian!" he shouted. "My God—what's happened?"

"Vickers!" That one word was all Patrick had time for, but it was enough. Sparks' jaw sagged and he had to grab at the railing as he came up beside him.

Patrick hurried down the stairs to meet the crew.

"Get back!" he shouted. "Nothing we can do up here. They've wrecked the controls. Pass out the rifles and we'll try to stand 'em off at the airlocks. It—it's the *Vengeance!*"

BALDWIN'S red face went gray. "The *Vengeance!*" He stood there stunned.

Don Haverill, second mate, moved toward Patrick, fury in his flat, beefy features.

"Where the hell have you been?" he snarled. "Fine kind of a warning to give us—after it's too late!"

His words shook the skipper out of his stupor.

"Cut that!" he barked. "You talk like an old woman. They won't get inside while there's a crew member alive! Get to the fore-lock and hold them, Haverill. Morris"—he indicated another

officer—"take five men to the stern-lock. The rest of you come with Patrick and me."

They scrambled down the companionway. Halfway to the bottom, they knew they were too late. The stern-lock burst open with a crash and a dozen stubby Plutonians poured through. Their terrible guns began to flash as they scattered through the crowd. Screams of dying men were added to the other unnerving sounds. Officers and passengers writhed down like ants under an acetylene flame.

Seconds later, the fore-lock fell inside. More Plutonians crowded into the main deck. Their rifles were never still as they cut a bloody path through the mob. Karl Vickers was among these killers. He towered two feet above his ruthless henchmen, his steel-gray hair bristly under the glass helmet he wore.

When the officers were discovered, Vickers gave an order that caused all the Plutonians to charge them. In the fight that ensued, Ian Patrick and the others played small part. With one rifle among them, they stood frozen there on the steps, their eyes filled with the sight of such butchery as befitted an abattoir, their nostrils cringing from the stench of burning flesh, their ears full of the horrible sounds of mass murder.

Karl Vickers, coming last, had to climb over the bodies of the dead. The floor was slippery with blood. Vickers' gray-blue uniform was splashed with scarlet.

At the last moment, Patrick remembered the gun he held. With a choked oath, he snapped it to his shoulder. One of the attackers flamed a shot at him before he could trigger. The end of the gun melted like thick syrup; Patrick dropped the red-hot weapon with a cry.

There was something unworldly about the scene. One minute before, the ship had been peacefully cruising the heavens. Now there were upwards of a hundred bodies spilling their blood on the floor, and Karl Vickers was standing there opening his face plate to speak to them. Ian Patrick was remembering Nathan's words:

"You're dooming this ship to death . . ."

He heard Vickers' harsh tones. "Where are the guns!" the hard-eyed warlord demanded.

Captain Baldwin showed amazing calmness.

"There are no guns, you madman!" he spat. "This is a passenger ship—not a munitions carrier!"

Vickers' brutal lips curled. Patrick, fighting for control, stared into the man's black eyes. It was like looking down into dark pools that plumbed the depths of hell. Whatever the ex-dictator had once been, he was no better than a mad butcher now.

"Captain, you lie." Vickers said that quietly, a cold smile flicking briefly across his lips. "Where are your holds?"

Baldwin was stiffly silent. Then, pointing aft, he growled:

"Down that companionway. But you won't find any guns."

Vickers turned to follow his pointing finger. In the next moment the skipper sprang.

A WARNING leaped to Ian Patrick's lips, but the swiftness of the elderly captain's jump cut it off. This was suicide, Patrick knew. Nevertheless, he did the best he could: launched himself in a dive at the Plutonians!

Captain and mate were alone in their attack. Don Haverill and the others crouched on the steps, paralyzed. Sparks was swearing under his breath and fighting to get by Haverill.

Vickers moved like a cat, twisting his

big body to the side and bringing his gun into action. The full impact of the charge detonated on the top of the skipper's head. Patrick felt the sizzling, crushing heat of it. His eyes streamed scalding tears. He saw Baldwin crumple and strike the floor among the attackers, a limp, scorched bundle of blue rags and gold braid.

The renegade was still moving in that same blur of speed. There was not time to bring the gun to bear on Patrick before Vickers' flying body crashed into him. The best he could do was to smash the weapon down on the back of Patrick's head, and he did that with gusto.

The young space pilot knew one blinding instant of pain. Nebulas whirled before his eyes, shooting stars exploded; then darkness came, and the world folded softly about him. . . .

From unconsciousness he climbed to a nauseous semi-coma. And out of coma he came, sputtering and coughing, into stark consciousness again. Someone took a brandy bottle from his lips as he sat up. It was old Jared Nathan. Nathan corked the bottle, face sober, eyes hard. They were huddled in a corner of the room, the twenty-five who were left. A few Plutonians stood guard over them while the rest carried guns from the hold. Sparks sat on the floor, head held in his hands.

"I'm not one to kick a man when he's down," Nathan muttered, "but—I think I mentioned something like this might happen!"

Unreasoning anger shot through Patrick's brain. He shoved the old man away.

"Damn you!" he choked. "We've got you to thank for this! Somebody tipped Vickers off that we were carrying guns. Who would do it—but you!"

Don Haverill faced the space pilot hotly.

"And who gave him the chance to do it—but you, Patrick! I've seen you sneak newspapers into his room time and again. Maybe you gave him a radio, too—that he could convert into a transmitter to get in touch with Vickers!"

Patrick lurched to his feet and his fist drew back. A big, beefy man stopped him by thrusting a fat paw in his chest. He was Charles Lionel, wealthy head of Mikron Laboratories, America's greatest radio plant.

"Take it easy, Patrick," he snapped. "Don't start trouble when we've got enough of our own. Haverill's words make sense. We'll look into your part in this when we get home—if ever." His bulldog jowls set stubbornly.

Most of the survivors were sitting, standing or lying with blank faces and shocked eyes, taking no interest in what happened. A few were wounded, the rest past caring what went on. One of the few who had witnessed the by-play spoke now. His voice had a low, tense note.

"Let's forget our grudges and try to think!" he advised. His gray eyes flashed about the group. When he spoke, his thin lips barely moved.

"Whether we all die or not, the primary fact is that Karl Vickers' possession of the Kuhlons means doom for Earth and Mars. Gentlemen—we've got to stop him from leaving with them!"

Patrick's gaze snapped to him.

"Now somebody's talking sense! But how are a handful of terriers like us going to whip that pack of wolves?"

The quiet, gray-eyed man squinted. Patrick knew him for Page Theron, another big industrialist who had been bound for the conference on Mars. Theron shook his head slowly.

"I don't know," he said frankly. "But if we could just get Vickers himself, it would stop the Plutonian attack for good. They aren't leaders; just sav-

ages. If we only had a gun—"

Sparks glanced up quickly. "Wait a minute! The radio was still working when I left. We'll flash word to the fleets the minute Vickers leaves. They'll intercept him before he can get into his hideout, wherever it is."

LIONEL nodded eagerly. "You've said something, Mister! No use trying to stop him ourselves. But a few dozen cruisers will be more than a match for him."

"And if he slips through them as he slipped through the blockade?" Page Theron spread his fingers eloquently. "No; I say we rush him when he gets close enough!"

"Sounds like a prescription for suicide to me," observed Sparks.

Theron snapped his shrewd gray eyes upon the radio man.

"Suicide for us—but salvation for Earth, Mars and Venus!"

Lionel pursed his lips, and Patrick frowned at thought of such a risk.

Suddenly Sparks came to his feet, pointing upward.

"Caesar's ghost!" he cried. "Look!"

Karl Vickers had strode out on the balcony with an armful of vacuum tubes. He dropped them over the railing and they shivered into fragments on the floor. A couple of Plutonians followed him with armfuls of other vital radio equipment.

Page Theron smiled ironically. "Apparently we must follow my plan after all. I suggest you be ready to leap when I give the word!"

CHAPTER III

Master of the Damned

THE gutting of the *Oracle* was over in another fifteen minutes. For the little group on the main deck, it was like watching the approach of the executioner when Karl Vickers strode toward them again.

The unloading of the Kuhlon guns had been completed, and as a final move the warlord had caused the boxes of food which the ship carried to be piled in the middle of the floor.

"You may think me hard," Vickers smiled, "but I can't afford to take the chances a softer man would. I'm not particular whether you die or not. All I care is that the fate of the Kuhlons doesn't leak out too soon. To that end, I have destroyed your radio equipment and my men are now wrecking your rocket tubes. As a matter of principle, I shall also destroy the food. Purely principle," he sneered.

He turned swiftly, his gun playing a steady stream of projectiles upon the pile of food. In something under ten seconds, there was nothing left of the boxes of provisions but ashes and smoke.

"A typical move, brother!" It was Jared Nathan who had spoken, and the voice brought Karl Vickers around with sagging jaw. He stared at the traitor who had set him loose on the world fifteen years before. And suddenly his hearty laughter boomed, as recognition came to him.

"Jared! You—on this ship!" He stuffed his gun in its holster, but the short, thick-bodied Plutonian guard moved in closer. Ian Patrick heard Theron catch a quick breath beside him.

Vickers stuck out a hand to Nathan. "Fifteen years! You've changed, Jared. For the worse, I'm afraid. All these years I've been hoping to run across you and square that old debt. Thank your stars my men didn't kill you when we came in! You'd have been cheated out of the privilege of working with me. You're coming with us, brother!"

Patrick stared from Vickers to Nathan. "Brother," they had called each other! Did that explain Nathan's treachery?

Jared Nathan met Vickers' glance, ignoring the proffered hand.

"You don't owe me anything, Karl. "I'm the debtor now. If I had a gun in my hand, I could write that debt off the books with a great deal of pleasure."

Fury stormed into the other's face.

"Is that supposed to be a joke?" he snarled.

"Not to me," Nathan snapped. "You promised to leave the solar system and never come back, if I gave you your freedom. As your brother, I was foolish enough to listen. I sacrificed my own freedom, and the respect of every soul in the world, to save you from death. To thank me, you let me down like this!"

Vickers' heavy jaw worked. Abruptly, his big fist came up from his side. The sharp knuckles smashed into Jared Nathan's mouth, sending him back against the wall. Blood trickled from his split lips.

"You always were a fool, Nathan!" the renegade barked. "Well, stay here and starve like the damned fool you are!"

Turning to his men, he cracked out an order. In the next instant he had fallen back and the guards were between the handful of Earthlings and himself.

Theron groaned. "Too late!" he muttered. "If we'd jumped him then—"

"We'd have been killed anyway," was Sparks' dry response.

Ian Patrick felt as a man in quicksand must feel—utterly helpless. Karl Vickers and his crew were moving toward the air-locks, and with every step they took, the helpless peoples of Earth and Mars were brought that much nearer to slavery. At the last moment, when the rest of his men had gone, Vickers turned back. Something like regret brought a scowl between his eyes.

"Have I been hasty, Jared?" he called back. "After all, I owe you my life. It's not too late to change your mind. Luxury and endless pleasures with us—or starvation here. Which is it going to be?"

"Starvation, and to hell with you!" Nathan gave back. "All these years I've been thinking I was as rotten as they come, but now I see there's someone a few stages lower. I wouldn't be polluting myself by going with you!"

Vickers' harsh laugh was cut off by his shutting the face-plate to his helmet. He stepped back into the air-lock and the door slammed. The next moment, the sigh of escaping air told of his departure.

FOR a few minutes after the *Vengeance's* departure, carrying the renegades on their way, the little crew in the murder ship wandered dumbly about the floor. Lionel, Theron and the other business men went in search of friends who might still be alive. But a check-up showed that there were no wounded—only dead. The disintegrator guns possessed a progressive action; the slightest wound developed swiftly into a burning, spreading sore that soon covered the whole body and brought death.

Ian Patrick felt responsibility bearing down on him like a crushing weight. Baldwin's death automatically elevated him to the position of captain. But what cheer could he offer these twenty-five men who would soon be looking to him for a way out? Sparks, standing beside him, sensed what was going on in his mind, and was glumly silent.

It was possible that the rockets could be repaired, Patrick supposed. But without food, the men would soon be sick, ready to fight at the slightest

cause, as the first pangs of starvation griped their shrinking bellies. Rockets or radio: these were their two slim chances.

More to keep the men occupied than for any other reason, Patrick decided to put them to work. At his call, they came listlessly to the stairs, where he stood on the third step. Haverill stared at him hostilely; Lionel had a sour glance for him as well. Patrick sensed that his friendship with Jared Nathan, whom they pointedly shunned, had caused ill feeling already.

"There's a job for every man of us," Patrick told them, "and we might as well be doing it. Sparks, how about the radio? Think you can do anything with it?"

Sparks frowned thoughtfully, cocking his head on the side.

"I won't say 'yes,' and I won't say 'no,'" he pondered. "I've got a few spare parts stuck away, and it's just possible—"

Patrick acted as though he hadn't seen Sparks' furtive wink. The pudgy radio man caught on quickly.

"Good!" he nodded. "Get to work on it. Horace—" He turned to the big Negro cook, who stood mournfully at the foot of the stairs. "If this were a sailing vessel, your job might be easier. We could have boiled rigging, at least. Think you can find anything at all—flour, rice?"

Horace nodded. "I got a little bit o' stuff stashed away, Mistuh Patrick. 'Most a month's 'mergency rations below deck that they don' find!"

"Thank God for that!" Ian Patrick murmured gratefully. "See what you can concoct. Haverill, take a dozen men and look over the remains of the rockets. You, Lionel, organize a clean-up crew to get rid of the bodies. The disposal chute is the quickest and safest way of getting them out of the ship. Keep working, all of you, until you hear the dinner bell."

A few of the men moved off. But Haverill and Lionel did not stir. Patrick snapped:

"Did you hear me? I told you to get to work!"

Don Haverill stuck his thumbs under his belt.

"Some of us don't like to take orders from a friend of Jared Nathan," he drawled. "Nathan's as much to blame for this as Karl Vickers."

Patrick shifted his glance to the portly tycoon.

"How about you, Lionel?"

Charles Lionel met his glare. "That goes for me too."

Patrick came down the steps slowly, but when he snapped into action, he was chain lightning. Haverill ducked and threw up his hands. The new captain's fist went through his guard like a bullet. Haverill's jaw resounded to the flat smash of the blow. He tried to turn aside to escape further punishment, but Patrick had him by the shirt front. He chopped two vicious punches into his face, followed with a short jab to the belly.

When the mate doubled over, Patrick pulled him up with a wicked uppercut to the point of the chin. Haverill went over backward and landed on his shoulder blades. Patrick pivoted.

Charles Lionel made feeble, pawing efforts to ward off the lighter, more muscular man. Patrick jabbed at his fleshy features until they were red and swollen. A final blow to the stomach caused Lionel to sit down with a windy grunt.

"Anybody else want to be captain?" Patrick shot at the group.

HEADS shook. Someone grunted: "At your service, Captain. I've got a glass jaw myself!"

"We'll get along fine then," Patrick

grinned. "Just remember there'll be more for the next mutineer. It may help you keep on the job!"

Patrick went above to get the final verdict on the transmitter. He met Sparks at the radio room door. Gloom shrouded the radio man's face. By way of explanation, he jerked a thumb at the interior.

Patrick looked in. His jaw hardened; then he slapped Sparks on the back.

"As scrap metal, it might bring a few dollars," he chuckled. "But as a transmitter—well, we'll find another job for you, Sparks. Apparently you haven't got a radio any more."

Side by side, they went down the hall. Down on the main deck, they could see Lionel busily supervising the ambulance corps, his glance fearfully straying upward from time to time. Clanking sounds on the shell of the craft told of First Mate Haverill's change of heart.

They had hardly reached the bridge to check on possible damage there, when Jared Nathan rushed in, awkward and breathless in a bulky space suit. In his agitation he made a great job of opening the face-plate. Finally the glass door was flung back and his words came streaming out.

"Captain! he panted. "Haverill says if we've got acetylene torches, we can have the rocket tubes in working order inside of three days! Will you come up and check on it?"

Patrick was stunned. Sparks recovered his voice first.

"Holy Jupiter! If that big blowhard is only right for once!"

Ian Patrick whirled to the locker and dragged out space suits and helmets. He and Sparks climbed into them, while Nathan anxiously stood on one foot and then the other. Watching him out of the corner of his eye, Patrick could not believe his excitement was feigned. Whatever his past, Jared Nathan seemed to have thrown his lot wholeheartedly in with Vickers' enemies now.

In forty-five seconds, the three of them were piling out the air-lock and tramping across the silvery surface of the space craft. At the fish-tail stern, they found Haverill and several others working with crowbars and sledges on the starboard rocket tube.

Haverill kept his battered features turned away from Patrick's view, but his voice crackled through the earphones.

"They bungled the job for sure! Look at this—they cut a wedge out of the tube about six feet back, so all the power would go out the side when it was blasted. They melted the barrel of the funnel, and tore off the landing fins. But we can patch the things up if we've got torches and enough acetylene!"

Patrick took it all in with narrowed eyes. He'd served his apprenticeship in space-craft factories, and still felt more at home driving rivets than punching control buttons.

"I think we can do it," he decided at last. "There are a dozen torches in the tool closet, and we'll use rocket fuel if we run out of acetylene."

He straightened slowly, looking off into the void that had swallowed Vickers.

"They all make one error. Missing our emergency food and botching the tubes was Vickers' mistake. The first battle in the war to annihilate him will be fought right here on this ship!"

CHAPTER IV

Rain—in Space!

NIGHT and day, torches drove their incandescent tongues into the tough hide of the *Oracle*, cutting away ragged edges, welding into place new pieces salvaged from floor and cabin walls. Ian

Patrick headed the crew working on the central stern rocket. At twelve o'clock, two days after the tragedy, he saw the last plate fitted in, the final rivet buffed smooth.

Excitement spread through the ship. Patrick kindled that eagerness to white heat by announcing that they would be on their way within the hour—on one rocket!

His plan was simple—and dangerous. Limp along on that one tube and work on the others as they went! It might mean fatal accidents to workmen clinging to the outside of the shell, but the men were ready for anything—anything that would get them home.

While the crew went to work on the starboard stern rocket, Patrick called a conference in the chart room. He included Charles Lionel and Page Theron in the five-man roll call. As navigators, they were useless; but the other men seemed to look to them for advice, and it was Patrick's idea to fill them with enthusiasm and thus keep the coöperation of the others. He was under no illusion that the job was over.

Haverill had taken the reckonings. They showed that the *Oracle's* drift had carried her to a point about a day closer to Ganymede than Mars. There was a navigation station on Ganymede, if Vickers hadn't gutted it; but doubt as to whether or not he had done so raised a question. Patrick put it up to them: Should they risk trying Ganymede, or head straight for Mars despite the loss of a precious day?

"I say Mars," Sparks suggested. "If we find Ganymede deserted, it'll be too late to do anything at all."

Lionel scrubbed at his unshaven red jowls.

"On the other hand, that extra day may defeat us in itself!"

The discussion was on, with Lionel and Haverill holding out for Ganymede, and Sparks and Patrick for Mars, and Theron waiting to be convinced. In the middle of the argument there was the sound of a lock rasping, and Jared Nathan stood in the doorway.

"Er—gentlemen!" he interrupted. "You aren't really intending to go to either of those stations, are you?"

"We didn't ask for your advice," Don Haverill snapped.

Nathan's eyes flashed sparks, but he held his temper down.

"If I may make a suggestion," he went on coolly, "it will be too late to stop Vickers whichever way we go. The only way to stop him is to follow him!"

"*Follow him!*" Charles Lionel began to laugh. "As if we haven't had enough of him already!"

Patrick jerked an impatient thumb at the intruder.

"You're out of order, Nathan. Beat it."

They turned their backs on him and were on the point of resuming the discussion when Jared Nathan cleared his throat.

"Er—one other thing. Among some odds and ends in the captain's stateroom, I found this. Now, don't you think you'd better do as I say?"

As one man, they whirled to face him. Nathan had a big pistol gripped in his hand and he was smiling coldly.

WITH a choked cry, Ian Patrick started for him. Nathan pivoted the weapon.

"Don't try it, Captain!" he warned. "I'm not afraid to use this if it comes to that. If I have to shoot every man on board, I'm going to make you see reason!"

There was silence; then oaths, shouts, threats. When the atmosphere cleared a little, Jared Nathan gestured at the door.

"I'll ask you gentlemen to leave, all

except Mr. Patrick. Don't waste your time looking for guns; this is the only one on board."

"But—good Lord, man!" Lionel burbled. "What do you intend to do?"

"Stop Vickers!" Nathan snapped the words. "It means the fall of our civilization if we don't. Once he gets the Kuhlons installed on a few of his ships, the show's over. I'll stop him if it costs every life on this ship!"

He took no more argument from them. From a weak, vacillating sot, he had overnight become a determined fanatic. At gun point, he forced the four of them out of the cabin.

"Now, then!" He sat down at the desk, laid the gun beside him, grabbed pencil and paper. "I may need you to help me with this course, Mr. Patrick. Been a long time since I plotted one—"

Patrick scowled. "You aren't serious about following the *Vengeance?*"

"Absolutely. For you and your friends, I am sorry. But it is all humanity against our twenty-five unimportant lives. This is the only way!"

Patrick tossed his hands. "But if there were the slightest chance of success! You know yourself that there isn't. Look at it sanely, man. We don't know where he's hiding, in the first place. In the second, if we did find him, he'd have five or six ships to our one. Besides, this is an unarmed passenger ship and his are fighters."

NATHAN tapped the shiny table top with his pencil.

"I'll take up your points in order. First, I think I can find him without trouble. Second, one good pilot can outmaneuver a dozen—and I flatter myself that I'm a good one. Third, I intend to install a gun immediately."

"Vickers took them all," countered Patrick.

"We've got fore-rockets, haven't we?" Nathan spoke crisply, exhibiting impatience with Patrick's stubbornness. "I'm going to convert one of our forward tubes into a cannon. Crude, perhaps; but I fancy a half ton of scrap iron hitting the *Vengeance* amidships will stop her as effectively as a modern ray gun. Do I answer your questions?"

"No. Granted that you can construct some sort of a gun. But how are we going to find that devil by rushing around in space like maniacs?"

"I have a theory about that hideout of his." Jared Nathan cocked an eye out the port. "Do you remember the *Luna,* that radioed for help just before she crashed into a strange asteroid somewhere near Jupiter? Navigators plotted the *Luna's* location, and there was no asteroid within a million miles of that spot. We're going to find the asteroid into which the *Luna* crashed, and when we find it—we'll find Karl Vickers."

"But you just said there was no such body!" Patrick protested.

"You're jumping to conclusions. I merely said none had been *found.* Why not? Because the asteroid is invisible! Don't smile—" Nathan pointed the pencil squarely at Patrick's nose.

"I've suspected the existence of invisible stars and planets for years," he emphasized. "The erratic behavior of certain stars can only be explained by the fact that they have invisible companions—binaries, which throw them off their normal courses. Light rays have been bent in the laboratory. Why not in space?

"A gaseous envelope around an asteroid might bend the light rays so that the asteroid would be completely invisible! That, Mr. Patrick, is what I expect to find is the case here. We're going to seek out Vickers, and when we find him—we'll destroy him for good!"

Ian Patrick stared at him, shoving

back his cap to scratch his head. Then, suddenly, he was sticking out his hand to Nathan, a sheepish grin on his face.

"I'll be damned if you haven't got it figured out from A to Z!" he chuckled. "You may have released that brother of yours once, but I'll take my oath on it that you're out for blood now. I'm with you, Nathan!"

Jared Nathan took his hand. He tried to say something, but his voice wouldn't come. Finally he turned away, moisture brimming in his eyes.

"I'll meet you on the bridge in five minutes, Captain. Time's wasting!"

THE *Oracle* limped away on schedule. Work proceeded steadily while they churned through the sky toward Jupiter. It was ten hours later that the second stern rocket was brought into action. Then Nathan put them to work on the forward rockets and his improvised cannon.

Ian Patrick only partly succeeded in convincing the others of the old man's sincerity. The foremost thing in their minds was that they were rushing toward almost certain doom. But they worked, under constant threat of Nathan's gun and Sparks' and Patrick's fists.

Nathan spoke once of his relationship with Karl Vickers, his brother. Until they were ten years old, they had been brought up together in Europe. Then the father and mother separated, the mother taking Nathan with her to America, where they became citizens. From that time on the two brothers' paths followed widely diverging trails.

Jared became a high air fleet official, while Karl gained fame as a radical. Since their mother had taken up her maiden name again—Nathan—their kinship was never disclosed. It had been her plea, Jared Nathan said, that caused him to release his brother against his own good judgment after the two-year war. And even then, it was only Karl Vickers' promise to find a new home on some far-off world.

Patrick, watching the emotion in Nathan's face as he spoke, was inclined to believe him, even if he could not condone his action.

Three days passed. The cannon was completed and a number of crude projectiles fashioned. Jared Nathan kept the men so busy, they had no time to grumble and organize resistance. Night period and day period they sweated over their tasks, polishing chromium when there was nothing else to do. The exhausted men limited their speech to monsyllabic grunts, too utterly done in to talk.

Bearded, hollow-cheeked, stumbling with fatigue, they kept going like automatons. But such a man-killing course could not go on long. The men were near the breaking point when Nathan announced, the fourth day out, that they could look for the asteroid any time now!

Terror mingled with hope as they rushed to the ports and stared ahead. A sort of savage eagerness to meet Karl Vickers again broke out. They already considered themselves as good as dead. If they could take the dictator with them, so much the better! But the void was empty in all directions.

Hours went by, and suspense dwindled. In the gun room, Sparks and his crew nodded half asleep on their racks of crude shells. A dull ache throbbed in Patrick's eyes as he continued to search the sky. In all the *Oracle*, only Nathan continued to hope.

Another hour, and even Nathan was losing his enthusiasm. His voice came dully from where he hunched over his charts.

"Anything ahead—even a—a speck of cloud vapor?" he asked wearily.

Patrick lifted his head out of a doze. The glass in front of him was streaky, and for a moment he could not understand why the vision was so poor. Then he realized that great drops of rain had begun to spatter against the windshield.

"Hard to tell," he muttered tonelessly. "Raining now. Can't see much!"

"Raining!" Jared Nathan shouted as he leaped from his chair. "Good Lord, man, have you lost your mind? Don't you know what that means? We're in some asteroid's atmosphere!"

CHAPTER V

The Final Blow

PATRICK heaved himself erect. Jared Nathan pounced on him and forced him out of the pilot's chair. He gave both forward rockets full blast and stared anxiously ahead.

Rain indeed! Buckets of it, rivers of it, driving in sheets against the glass, pattering like a thousand tiny bullets. Best of all, betokening the invisible planetoid ahead of them!

The *Oracle* groaned in every bulkhead. Her mad forward rush was broken. Down below, they could hear dishes crashing and men yelling as they were pitched to the floor. Nathan stabbed at the alarm buttons. His skinny body stiffened and he pointed ahead.

"There she is!" he yelled. "Clouds —mountains—"

Out of nothingness filtered a dark precipitate. A precipitate that rapidly resolved itself into mountains and valleys. The planet was small; they could see the horizon curving down out of sight on all sides. Nathan had to keep every rocket belching to prevent them from crashing. The *Oracle* almost brushed a peak as it tilted upward.

Nathan leveled it off over a broad, rain-soaked valley. His voice carried a ring of steel as he relaxed from the controls.

"Nothing to do now but find him. That won't be hard on a planet of this size. He'll be out after us as soon as he hears our rockets."

A queer huskiness lay over Patrick's words.

"He's already found us, Nathan. Look below—in that little pocket in the hills. Six ships on a landing field!"

Nathan's bright eyes dropped to the floor port. Then he saw them. An array of disk-like ships arranged in a circle, like plates on a dinner table. Men, looking like ants, scurried around them. Some of them stood with feet widespread, staring upward.

Nathan snapped on the general alarm, drew the microphone to him.

"Places!" he yelled. "Snap on safety belts. You in the gun room, fire at my signal."

His thin hand drew at the accelerator, tilted the *Oracle* over in a vertical dive.

Sheer, down-rushing speed snapped Ian Patrick against the back of his seat. There was no need for safety belts yet. Raw fuel gushed into blazing rockets and sent them blasting downward at unbelievable speed. One second the landing field was a faraway penny against the green of wild hills; the next, a barrel-head; and now it was a flat circle of terrain on which space-suited figures rushed into their pursuit ships for a lightning take-off.

Patrick knew that this first unheralded attack carried all their hopes. Against those six ships, armed with the deadly Kuhlon guns, they would be powerless. Their first shot must destroy the *Vengeance,* or the race through space had indeed been a madman's dream.

Down . . . down . . . down! Every second, Patrick expected the command

to fire. When it seemed that they could never come out of the dive, Jared Nathan screeched the order to Sparks.

Simultaneously, Nathan cut the stern rockets and ignited the forward tubes with a deafening roar of titanic power. In that ear-crushing volley of sound, the higher crack of the cannon was almost lost. Patrick stared downward, watching for the effect of the shot.

A split second later, one of the ships leaped and fell back with its turret torn away. But it was not the *Vengeance*. The *Oracle* had ventured—and lost.

Ian Patrick could not know the terrible bitterness that filled Nathan's heart. All he knew was that the *Oracle* was out of its dive and zooming back into the sky. His nose was bleeding from the terrible pressure; every bone felt as though it must crack.

Then, through the squeal of straining braces Patrick heard Nathan shout into the microphone:

"Reload!"

Bitterly, he raised his head and stared at the old fighters. Nathan hadn't given up yet; wouldn't give up, he knew, until the *Oracle* was a mass of molten girders.

THE *Vengeance* and her four sisters were after them now. Ruby-colored rays crisscrossed above and below them. Constant explosions tossed the fleeing craft like a feather in a wind. The power of the Kuhlons was unbelievable. Where the scorching rays whipped the air, the very atmosphere cracked wide open.

Nathan, realizing Vickers would have their range in another moment, put the liner into a spiraling climb. The platter-like ships soared after them. In the relatively heavy atmosphere, they had breath-taking climbing and maneuvering power. Nathan saw that he must try another plan, so badly were they outclassed. While his fingers darted over the controls, the *Oracle* began a series of contortions that had its passengers dizzy and sick in a few seconds.

But the effort was futile. The Plutonians kept right behind, constantly closing the gap. Jared Nathan groaned and started climbing again. Kuhlon rays darted about them incessantly, sometimes almost touching the craft.

It was Patrick who first noticed the difference in the force of the rays.

"Nathan!" His voice bore an overtone of wonder. "The rays don't have the power up here that they had below. You don't suppose they're running out of fuel for the Kuhlon guns?"

"They don't use fuel." Nathan stared blankly at him, then swung his glance to the port as a ray flashed within ten feet of the ship. All of a sudden the sharp creases around the old man's mouth relaxed. He began to laugh. Softly, then wildly, triumphantly.

"Patrick!" he gasped. "Do you know the full name of the Kuhlon gun?"

"K u h l o n disrupter auxiliary, I think," Ian Patrick muttered.

"Auxiliary — there's your answer right there! They don't take the place of ordinary weapons, merely supplement them. The Kuhlon is deadly in a planet's atmosphere, but it's not worth a damn *in space!* Works through the heavier molecules, I suppose.* Now, if

* In all probability, the Kuhlon gun is helpless in a vacuum—space—and can operate only when the force of its disintegrating discharge is carried through the atmospheric belt surrounding a planetoid or an asteroid. In other words, some property of atmosphere, or perhaps a combination of them—oxygen, hydrogen, nitrogen, argon, among other constituents—provides the conductivity necessary for the metal-shattering ray to reach its objective. To prove this point, it would be an interesting experiment were the miniature lethal rays already invented, and which are said to be capable of destroying certain forms of animal life, such as a goat or a dog, to be focused on their victim through a vacuum.—Ed.

we can just lure them out a few hundred miles before they know what's happening! Then we can pick them off at our leisure!"

Flashed over the ship, that news almost caused a riot. From frightened lambs, the men became a pack of hungry wolves. In the gun room, Sparks waited impatiently for the moment when his gun would get a chance to sink metal fangs into the Plutonian ships. The *Oracle* streaked out into space, eating up several hundred miles.

With the *Vengeance* uncomfortably close, Nathan chose to act. He caused the rocket to sputter and miss, as if they were running low on fluid. The pursuers leaped after them like mad dogs. Jared Nathan gave them three seconds to close the gap. Then he skidded the *Oracle* around and faced them head-on!

"Fire!" He roared the command into the microphone.

The pursuing ships scrambled wildly out of the way. Pink tongues of flame streamed incessantly from their guns, but the rays fell on the *Oracle* as harmlessly as spotlight beams. The flat side of a Plutonian disk showed to the Earthmen for an instant, and before the craft could dart out of the way, a bullet had crashed through the shell and brought death to the crew.

The disks were perfect targets for the *Oracle* as she pivoted and raced after them. Nathan blasted four more shots into their midst and brought down another. Panic claimed the attackers. They were high-tailing it for home before another minute passed, their erstwhile victim right after them!

Nathan had to concentrate on the ship behind the *Vengeance,* for the flagship was out in the lead. He kept firing until finally a shot crashed through the craft and put it out of the fight.

At full rocket, the *Vengeance* and the *Oracle* seemed to have about the same power. Faster and faster, nearing their ultimate speed, they roared back toward the invisible planet. And now another element entered the fight.

Nathan had used six shells on the dodging renegade ship and none had found its mark. He had his sights lined for a seventh shot when the radio crackled with Sparks' excited voice.

"My God, Nathan—we've used our last shell!"

STRENGTH drained from Jared Nathan as water escapes through a dynamited dam. He slumped against the back of the chair. His haggard eyes found Ian Patrick's.

"Now what?" he croaked.

Patrick shoved stiff fingers through his hair.

"We could make more shells—"

"But not in time. Another three minutes will see us back in the atmosphere. Patrick, if Vickers makes it, we've lost. He'll be out with the Kuhlons and finish us!"

Nathan's eyes went desperately about the cabin—and stopped on a portable acetylene outfit standing in the corner, which had been used in repair work on the bridge. He sat straight up.

"There's the gun that's going to win for us!" he pointed.

"An acetylene torch? I don't get it," Patrick frowned.

"Listen! If we don't have any shells, we've at least got one more projectile. I mean me—in a space suit! Cut the cannon power down to one-tenth, and I could be launched and land safely on the *Vengeance.* Armed with that torch, I'll cut a hole in the ship big enough to drive a wagon through!"

Ian Patrick felt his heart begin to hammer with new hope.

"You know it means death for you!" he asked. "The explosion when the air

inside rushes out will destroy everything around the ship."

Jared Nathan was already on his feet and pushing Patrick into the pilot's chair.

"Do you think I care about that?" he rasped. "Maybe I prefer it that way. Call the gun room and tell them to have a small charge of fuel ready."

Ian Patrick gripped the old man's hand as he started to waddle out in the cumbersome suit.

"You're all right, Mister!" he breathed. "This makes you about even with society, I'd say!"

Nathan smiled, the smile of a tired little old man.

"Tell that to them—back on Earth—will you? It means a lot to hear that—after all these years."

Then he was gone, and Patrick settled down to the grim business of keeping on the tail of the *Vengeance*. He could discern, faintly, a gray blotch on the horizon that was the asteroid. After what seemed minutes, Sparks' voice whispered through the audio.

"Ready!"

Patrick centered the cross sights.

"Fire!" he clipped.

The cannon made a dull *pop!* A small object darted from the nose of the *Oracle*. Jared Nathan, halfway across the space between the two ships, turned and waved his arm at the others. Patrick wondered how many of them had lumps in their throats at that moment. . .

Seconds later Nathan was abreast of the enemy, a little to port. They saw him turn on the acetylene torch and use its hissing flame to force himself near the *Vengeance*. He managed to get one magnetic foot-plate on the sleek, black hull, and after that he was ready to work.

Feverishly, he sprang to the job. He burned a large circle on the metal with his blazing torch. Patrick glanced at his watch. Thirty seconds left out of the three minutes Nathan had given them. Thirty seconds before they would be back in the denser atmosphere at Vickers' mercy—

Nathan crawled about like an ant, swinging his torch, fighting against time, anxiously glancing ahead every few moments. Patrick could almost hear him swearing and praying in the same breath.

Fifteen seconds, now; ten—

The circular piece of metal, worn thin by the bite of the acetylene torch, burst loose like a manhole blown high by exploding sewer gas. The sharp edge of it sliced through Nathan's space-suit armor and let the precious air out. He writhed for an instant, then his body exploded like a deep-sea fish dragged to the surface.

The *Vengeance* began spewing men and equipment out that gaping hole, gutting herself of everything that was not bolted down. Pent-up pressure tore the hole wider, ripped the craft from stem to stern. A hundred little pink balloons vomited from the gash, to explode within seconds of reaching the atmosphere. Once those balloons had been men; now they were spatial dust.

CAPTAIN IAN PATRICK had little more than the strength to turn the *Oracle* and point her homeward. Already the battle, all the trying events of the past week, were commencing to seem like an ugly nightmare. There was only one thing that mattered now—home!

Home—and explanations to an anxious world. Whatever else those explanations included, they would be filled with praise for a man who had been branded a coward and a traitor, and had proved himself the bravest man Ian Patrick had ever known!

Scientific

For CENTURIES BOTH EUROPE AND THE AMERICAS WERE OVER-RUN BY TITANIC ANCESTORS OF THE MODERN ELEPHANT.

Near BOGOTA, IN COLOMBIA, THERE IS A HUGE PLAIN COVERED BY PETRIFIED SKELETONS OF MAMMOTHS CALLED, BY THE NATIVES, "THE FIELD OF GIANTS" . .

A MAMMOTH CALF, PERFECTLY PRESERVED, WAS TRANSPORTED 7800 MILES TO MOSCOW FROM A SIBERIAN GLACIER, ENCASED IN A HUGE BLOCK OF ICE .

COULD IT BE THAT IF IT WERE NOT FOR HUNTERS, THERE WOULD BE NO DEATH AMONG ELEPHANTS EXCEPT AT SUCH BURIAL GROUNDS ?

Mysteries

THE FATE OF THE MAMMOTH

By Joseph J. Millard

OF all the unsolved mysteries that intrigue science, none is more puzzling than the riddle offered by the mysterious death of the great mammoths. For centuries, both Europe and the Americas were overrun by great herds of these titanic ancestors of our modern elephant.

Then, about 12,000 years ago, some terrible catastrophe descended upon the world and completely wiped out the mammoth—*probably in the space of a few minutes!*

We have the vast ice fields of the Arctic to thank for our knowledge of these great beasts and for the riddle of their destruction. But not even the Arctic hints at what destructive force brought their end.

During the past 150 years, 84 complete carcasses of the huge mammoths have been found, perfectly preserved under tons of ice in Siberian and Alaskan glaciers. So perfect have these natural refrigerators kept the bodies that a few years ago, a mammoth calf was transported 7,800 miles to Moscow in a huge block of ice.

There Russian scientists dissected the body, studied the contents of its stomach and finally had a cook prepare mammoth steaks. The entire membership of the Geological Museum and the Academy of Sciences then dined on delicious steaks over 12,000 years old!

SUDDEN DEATH

But what puzzles science is the fact that such carcasses are found with their stomachs full of undigested food and even with food still unchewed in their great mouths. Furthermore, many are found in a standing position. All this indicates that death must have struck them almost instantaneously as they grazed among the pines, larches and firs of the once-warm Arctic zone.

Some scientists believe that 12,000 years ago, some great meteor struck the earth, knocking it off balance so far that the shift from tropical weather to frigid cold was almost instantaneous and that a huge mass of slime, spreading over the earth, trapped the beasts before they could flee.

The natives, however, have another explanation. They say that when Noah carried the animals of the earth into the Ark before the deluge, he had no room for two mammoths and so these creatures were left to perish in the flood. Anyone who has ever seen the mounted body of one of these mastodons in a museum will admit that it would take a big boat to accommodate a pair of them, along with the other beasts of the earth.

"FIELD OF GIANTS"

But not all the riddle of the giants is centered in the Arctic. Near Bogota, in Colombia, South America, there is a huge plain about 7,000 feet above sea level that is literally covered with petrified skeletons of mammoths. The natives call this the "Field of Giants" and regard it as a place set apart by the gods.

Although there is no natural ice to preserve entire carcasses, the bones give ample evidence that death occurred very swiftly there, too. Geologists have proved that whatever calamity caused this massive cemetery, must have occurred at about the same time as the mass death of the mammoths in the Arctic.

It is believed that mammoths once roamed over all of our present United States. Skeletons have been found in Florida, and many Indian relics as far north as Wisconsin and Iowa bear perfect reproductions of elephants.

PERMANENT IVORY SUPPLY

The tusks of these ancient monsters have formed a good part of the present world's production of ivory. In fact, although Russia has no elephants outside of a scattered few in zoos or circuses, the greatest share of the world's ivory comes from Arctic Russia. Even now, northeastern Siberia and the Novosibirsk archipelago supply over two-thirds of the world's ivory. An average of 250 mammoth skeletons are found in this region every year.

Even today, the elephant, the modern prototype of the ancient mammoth, furnishes plenty of mystery. For one thing, no one knows exactly how or where the mammoths of old gave way to the modern elephant.

One of the strangest of modern riddles concerns the death of elephants. It is a well-known fact that not even the natives of Africa in the very heart of elephant country, have ever seen the body of an elephant that died of natural causes. All those ever found have been killed by hunters.

The *English Hunters' Annuals,* which represent the finest and most authentic hunting literature of the world, reveal only one case in the last 25 years where the body of an elephant has been found

(Concluded on page 81)

The Day TIME

Dave Miller pulled the trigger—and time stopped! Was he the only man left alive?

DAVE MILLER would never have done it, had he been in his right mind. The Millers were not a melancholy stock, hardly the sort of people you expect to read about in the morning paper who have taken their lives the night before. But Dave Miller was drunk—abominably, roaringly so—and the barrel of the big revolver, as he stood against the sink, made a ring of coldness against his right temple.

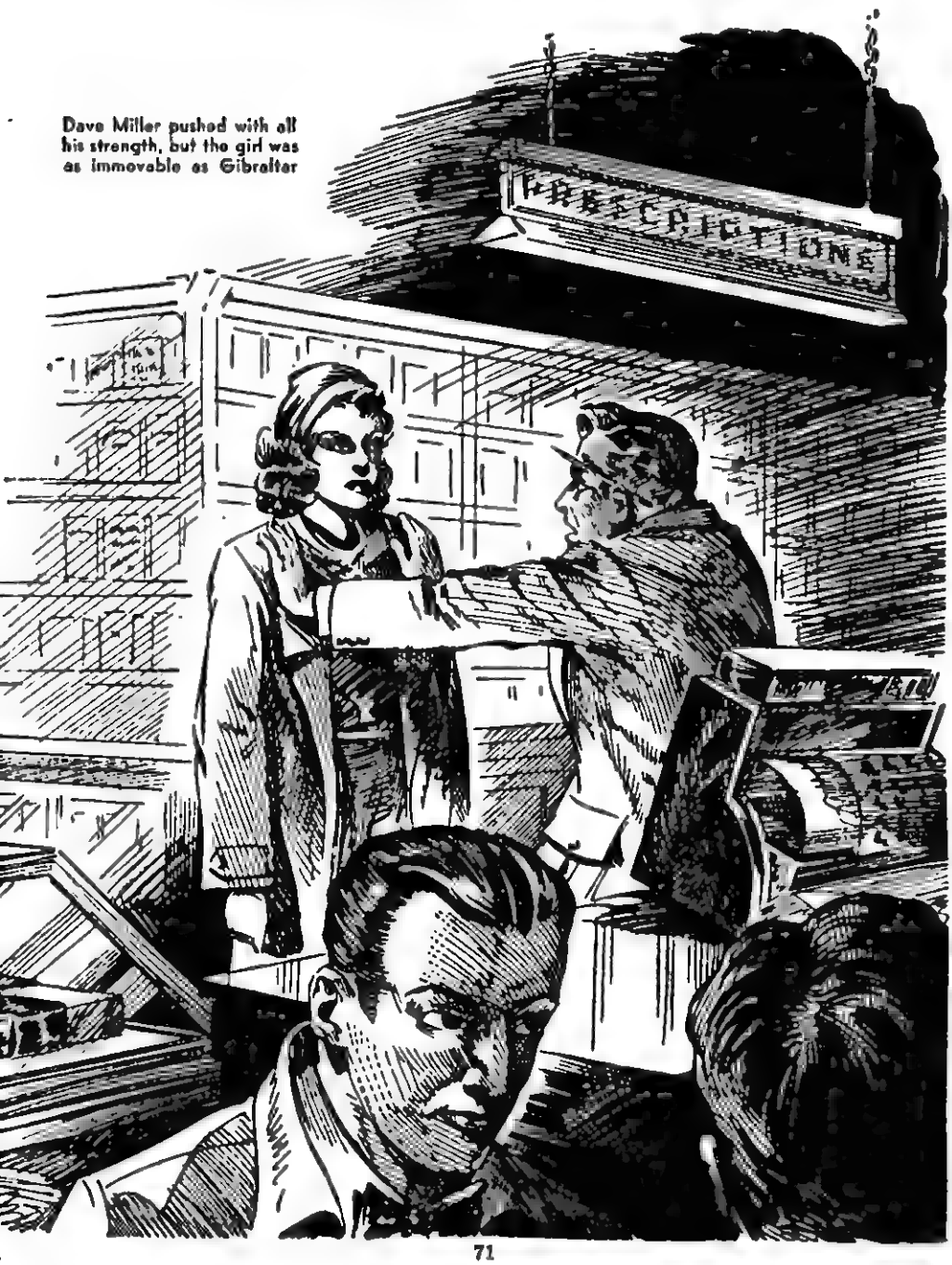
Dawn was beginning to stain the frosty kitchen windows. In the faint light, the letter lay a gray square against the drainboard tiles. With the melodramatic gesture of the very drunk, Miller had scrawled across the envelope:

"This is why I did it!"

He had found Helen's letter in the envelope when he staggered into their bedroom fifteen minutes ago—at a quarter after five. As had frequently happened during the past year, he'd come home from the store a little late

STOPPED MOVING

by BRADNER BUCKNER



Dave Miller pushed with all his strength, but the girl was as immovable as Gibraltar

. . . about twelve hours late, in fact. And this time Helen had done what she had long threatened to do. She had left him.

The letter was brief, containing a world of heartbreak and broken hopes.

"I don't mind having to scrimp, Dave. No woman minds that if she feels she is really helping her husband over a rough spot. When business went bad a year ago, I told you I was ready to help in any way I could. But you haven't let me. You quit fighting when things got difficult, and put in all your money and energy on liquor and horses and cards. I could stand being married to a drunkard, Dave, but not to a coward . . ."

So she was trying to show him. But Miller told himself he'd show her instead. Coward, eh? Maybe this would teach her a lesson! Hell of a lot of help she'd been! Nag at him every time he took a drink. Holler bloody murder when he put twenty-five bucks on a horse, with a chance to make five hundred. What man wouldn't do those things?

His drug business was on the skids. Could he be blamed for drinking a little too much, if alcohol dissolved the morbid vapors of his mind?

Miller stiffened angrily, and tightened his finger on the trigger. But he had one moment of frank insight just before the hammer dropped and brought the world tumbling about his ears. It brought with it a realization that the whole thing was his fault. Helen was right—he was a coward. There was a poignant ache in his heart. She'd been as loyal as they came, he knew that.

He could have spent his nights thinking up new business tricks, instead of swilling whiskey. Could have gone out of his way to be pleasant to customers, not snap at them when he had a terrific hangover. And even Miller knew nobody ever made any money on the horses—at least, not when he needed it. But horses and whiskey and business had become tragically confused in his mind; so here he was, full of liquor and madness, with a gun to his head.

Then again anger swept his mind clean of reason, and he threw his chin up and gripped the gun tight.

"Run out on me, will she!" he muttered thickly. "Well—this'll show her!"

In the next moment the hammer fell . . . and Dave Miller had "shown her".

MILLER opened his eyes with a start. As plain as black on white, he'd heard a bell ring—the most familiar sound in the world, too. It was the unmistakable tinkle of his cash register.

"Now, how in hell—" The thought began in his mind; and then he saw where he was.

The cash register was right in front of him! It was open, and on the marble slab lay a customer's five-spot. Miller's glance strayed up and around him.

He was behind the drug counter, all right. There were a man and a girl sipping cokes at the fountain, to his right; the magazine racks by the open door; the tobacco counter across from the fountain. And right before him was a customer!

Good Lord! he thought. Was all this a—a dream?

Sweat oozed out on his clammy forehead. That stuff of Herman's that he had drunk during the game—it had had a rank taste, but he wouldn't have thought anything short of marihuana could produce such hallucinations as he had just had. Wild conjectures came boiling up from the bottom of Miller's being.

How did he get behind the counter?

Who was the woman he was waiting on? What—

The woman's curious stare was what jarred him completely into the present. Get rid of her! was his one thought. Then sit down behind the scenes and try to figure it all out.

His hand poised over the cash drawer. Then he remembered he didn't know how much he was to take out of the five. Avoiding the woman's glance, he muttered:

"Let's see, now, that was—uh—how much did I say?"

The woman made no answer. Miller cleared his throat, said uncertainly:

"I beg your pardon, ma'am—did I say—seventy-five cents?"

It was just a feeler, but the woman didn't even answer to that. And it was right then that Dave Miller noticed the deep silence that brooded in the store.

Slowly his head came up and he looked straight into the woman's eyes. She returned him a cool, half-smiling glance. But her eyes neither blinked nor moved. Her features were frozen. Lips parted, teeth showing a little, the tip of her tongue was between her even white teeth as though she had started to say "this" and stopped with the syllable unspoken.

Muscles began to rise behind Miller's ears. He could feel his hair stiffen like filings drawn to a magnet. His glance struggled to the soda fountain. What he saw there shook him to the core of his being.

The girl who was drinking a coke had the glass to her lips, but apparently she wasn't sipping the liquid. Her boy friend's glass was on the counter. He had just drawn on a cigarette and exhaled the gray smoke. That smoke hung in the air like a large, elongated balloon with its smaller end disappearing between his lips. While Miller stared, the smoke did not stir in the slightest.

There was something unholy, something supernatural, about this scene!

With apprehension rippling down his spine, Dave Miller reached across the cash register and touched the woman on the cheek. The flesh was warm, but as hard as flint. Tentatively, the young druggist pushed harder; finally, shoved with all his might. For all the result, the woman might have been a two-ton bronze statue. She neither budged nor changed expression.

Panic seized Miller. His voice hit a high, hysterical tenor as he called to his soda-jerker.

"Pete! *Pete!*" he shouted. "What in God's name is wrong here?"

The blond youngster, with a towel wadded in a glass, did not stir. Miller rushed from the back of the store, seized the boy by the shoulders, tried to shake him. But Pete was rooted to the spot.

Miller knew, now, that what was wrong was something greater than a hallucination or a hangover. He was in some kind of trap. His first thought was to rush home and see if Helen was there. There was a great sense of relief when he thought of her. Helen, with her grave blue eyes and understanding manner, would listen to him and know what was the matter.

HE left the haunted drug store at a run, darted around the corner and up the street to his car. But, though he had not locked the car, the door resisted his twisting grasp. Shaking, pounding, swearing, Miller wrestled with each of the doors.

Abruptly he stiffened, as a horrible thought leaped into his being. His gaze left the car and wandered up the street. Past the intersection, past the one beyond that, on up the thoroughfare until the gray haze of the city dimmed everything. And as far as Dave Miller could see, there was no trace of motion.

Cars were poised in the street, some passing other machines, some turning corners. A street car stood at a safety zone; a man who had leaped from the bottom step hung in space a foot above the pavement. Pedestrians paused with one foot up. A bird hovered above a telephone pole, its wings glued to the blue vault of the sky.

With a choked sound, Miller began to run. He did not slacken his pace for fifteen minutes, until around him were the familiar, reassuring trees and shrub-bordered houses of his own street. But yet how strange to him!

The season was autumn, and the air filled with brown and golden leaves that tossed on a frozen wind. Miller ran by two boys lying on a lawn, petrified into a modern counterpart of the sculptor's "The Wrestlers". The sweetish tang of burning leaves brought a thrill of terror to him; for, looking down an alley from whence the smoke drifted, he saw a man tending a fire whose leaping flames were red tongues that did not move.

Sobbing with relief, the young druggist darted up his own walk. He tried the front door, found it locked, and jammed a thumb against the doorbell. But of course the little metal button was as immovable as a mountain. So in the end, after convincing himself that the key could not be inserted into the lock, he sprang toward the back.

The screen door was not latched, but it might as well have been the steel door of a bank vault. Miller began to pound on it, shouting:

"Helen! Helen, are you in there? My God, dear, there's something wrong! You've got to—"

The silence that flowed in again when his voice choked off was the dead stillness of the tomb. He could hear his voice rustling through the empty rooms, and at last it came back to him like a taunt: *"Helen! Helen!"*

CHAPTER II

Time Stands Still

FOR Dave Miller, the world was now a planet of death on which he alone lived and moved and spoke. Staggered, utterly beaten, he made no attempt to break into his home. But he did stumble around to the kitchen window and try to peer in, anxious to see if there was a body on the floor. The room was in semi-darkness, however, and his straining eyes made out nothing.

He returned to the front of the house, shambling like a somnambulist. Seated on the porch steps, head in hands, he slipped into a hell of regrets. He knew now that his suicide had been no hallucination. He was dead, all right; and this must be hell or purgatory.

Bitterly he cursed his drinking, that had led him to such a mad thing as suicide. Suicide! He—Dave Miller—a coward who had taken his own life! Miller's whole being crawled with revulsion. If he just had the last year to live over again, he thought fervently.

And yet, through it all, some inner strain kept trying to tell him he was not dead. This was his own world, all right, and essentially unchanged. What had happened to it was beyond the pale of mere guesswork. But this one thing began to be clear: This was a world in which change or motion of any kind was a foreigner.

Fire would not burn and smoke did not rise. Doors would not open, liquids were solid. Miller's stubbing toe could not move a pebble, and a blade of grass easily supported his weight without bending. In other words, Miller began to understand, change had been stopped as surely as if a master hand had put a finger on the world's balance wheel.

Miller's ramblings were terminated

by the consciousness that he had an acute headache. His mouth tasted, as Herman used to say after a big night, as if an army had camped in it. Coffee and a bromo were what he needed.

But it was a great awakening to him when he found a restaurant and learned that he could neither drink the coffee nor get the lid off the bromo bottle. Fragrant coffee-steam hung over the glass percolator, but even this steam was as a brick wall to his probing touch. Miller started gloomily to thread his way through the waiters in back of the counter again.

Moments later he stood in the street, and there were tears swimming in his eyes.

"Helen!" His voice was a pleading whisper. "Helen, honey, where are you?"

There was no answer but the pitiful palpitation of utter silence. And then, there was movement at Dave Miller's right!

Something shot from between the parked cars and crashed against him; something brown and hairy and soft. It knocked him down. Before he could get his breath, a red, wet tongue was licking his face and hands, and he was looking up into the face of a police dog!

Frantic with joy at seeing another in this city of death, the dog would scarcely let Miller rise. It stood up to plant big paws on his shoulders and try to lick his face. Miller laughed out loud, a laugh with a throaty catch in it.

"Where'd you come from, boy?" he asked. "Won't they talk to you, either? What's your name, boy?"

There was a heavy, brass-studded collar about the animal's neck, and Dave Miller read on its little nameplate: "Major."

"Well, Major, at least we've got company now," was Miller's sigh of relief.

For a long time he was too busy with the dog to bother about the sobbing noises. Apparently the dog failed to hear them, for he gave no sign. Miller scratched him behind the ear.

"What shall we do now, Major? Walk? Maybe your nose can smell out another friend for us."

They had gone hardly two blocks when it came to him that there was a more useful way of spending their time. The library! Half convinced that the whole trouble stemmed from his suicide shot in the head—which was conspicuously absent now—he decided that a perusal of the surgery books in the public library might yield something.

THAT way they bent their steps, and were soon mounting the broad cement stairs of the building. As they went beneath the brass turnstile, the librarian caught Miller's attention with a smiling glance. He smiled back.

"I'm trying to find something on brain surgery," he explained. "I—"

With a shock, then, he realized he had been talking to himself.

In the next instant, Dave Miller whirled. A voice from the bookcases chuckled:

"If you find anything, I wish you'd let me know. I'm stumped myself!"

FROM a corner of the room came an elderly, half-bald man with tangled gray brows and a rueful smile. A pencil was balanced over his ear, and a notebook was clutched in his hand.

"You, too!" he said. "I had hoped I was the only one—"

Miller went forward hurriedly to grip his hand.

"I'm afraid I'm not so unselfish," he admitted. "I've been hoping for two hours that I'd run into some other poor soul."

"Quite understandable," the stranger

murmured sympathetically. "But in my case it is different. You see—I am responsible for this whole tragic business!"

"You!" Dave Miller gulped the word. "I—I thought—"

The man wagged his head, staring at his note pad, which was littered with jumbled calculations. Miller had a chance to study him. He was tall, heavily built, with wide, sturdy shoulders despite his sixty years. Oddly, he wore a gray-green smock. His eyes, narrowed and intent, looked gimlet-sharp beneath those toothbrush brows of his, as he stared at the pad.

"There's the trouble, right there," he muttered. "I provided only three stages of amplification, whereas four would h a v e b e e n barely enough. No wonder the phase didn't carry through!"

"I guess I don't follow you," Miller faltered. "You mean—something you did—"

"I should think it was something I did!" The baldish stranger scratched his head with the tip of his pencil. "I'm John Erickson—you know, the Wanamaker Institute."

Miller said: "Oh!" in an understanding voice. Erickson was head of Wanamaker Institute, first laboratory of them all when it came to exploding atoms and blazing trails into the wildernesses of science.

ERICKSON'S piercing eyes were suddenly boring into the younger man.

"You've been sick, haven't you?" he demanded.

"Well—no—not really sick." The druggist colored. "I'll have to admit to being drunk a few hours ago, though."

"Drunk—" Erickson stuck his tongue in his cheek, shook his head, scowled. "No, that would hardly do it. There must have been something else. The impulsor isn't *that* powerful. I can understand about the dog, poor fellow. He must have been run over, and I caught him just at the instant of passing from life to death."

"Oh!" Dave Miller lifted his head, knowing now what Erickson was driving at. "Well, I may as well be frank. I'm—I committed suicide. That's how drunk I was. There hasn't been a suicide in the Miller family in centuries. It took a skinful of liquor to set the precedent."

Erickson nodded wisely. "Perhaps we will find the precedent hasn't really been set! But no matter—" His lifted hand stopped Miller's eager, wondering exclamation. "The point is, young man, we three are in a tough spot, and it's up to us to get out of it. And not only we, but heaven knows how many others the world over!"

"Would you—maybe you can explain to my lay mind what's happened," Miller suggested.

"Of course. Forgive me. You see, Mr.—"

"Miller. Dave Miller."

"Dave it is. I have a feeling we're going to be pretty well acquainted before this is over. You see, Dave, I'm a nut on so-called 'time theories.' I've seen time compared to everything from an entity to a long, pink worm. But I disagree with them all, because they postulate the idea that time is constantly being manufactured. Such reasoning is fantastic!

"Time exists. Not as an ever-growing chain of links, because such a chain would have to have a tail end, if it has a front end; and who can imagine the period when time did not exist? So I think time is like a circular train-track. Unending. We who live and die merely travel around on it. The future exists simultaneously with the past, for one instant when they meet."

MILLER'S brain was humming. Erickson shot the words at him staccato-fashion, as if they were things known from Great Primer days. The young druggist scratched his head.

"You've got me licked," he admitted. "I'm a stranger here, myself."

"Naturally, you can't be expected to understand things I've been all my life puzzling about. Simplest way I can explain it is that we are on a train following this immense circular railway.

"When the train reaches the point where it started, it is about to plunge into the past; but this is impossible, because the point where it started is simply the caboose of the train! And that point is always ahead—and behind—the time-train.

"Now, my idea was that with the proper stimulus a man could be thrust across the diameter of this circular railway to a point in his past. Because of the nature of time, he could neither go ahead of the train to meet the future, nor could he stand still and let the caboose catch up with him. But—he could detour across the circle and land farther back on the train! And that, my dear Dave, is what you and I and Major have done—almost."

"Almost?" Miller said hoarsely.

Erickson pursed his lips. "We are somewhere partway across the space between present and past. We are living in an instant that can move neither forward nor back. You and I, Dave, and Major—and the Lord knows how many others the world over—have been thrust by my time impulsor onto a timeless beach of eternity. We have been caught in time's backwash. Castaways, you might say."

An objection clamored for attention in Miller's mind.

"But if this is so, where are the rest of them? Where is my wife?"

"They are right here," Erickson explained. "No doubt you could see your wife if you could find her. But we see them as statues, because, for us, time no longer exists. But there was something I did not count on. I did not know that it would be possible to live in one small instant of time, as we are doing. And I did not know that only those who are hovering between life and death can deviate from the normal process of time!"

"You mean—we're dead!" Miller's voice was a bitter monotone.

"Obviously not. We're talking and moving, aren't we? But—we are on the fence. When I gave my impulsor the jolt of high power, it went wrong and I think something must have happened to me. At that same instant, you had shot yourself.

"Perhaps, Dave, you are dying. The only way for us to find out is to try to get the machine working and topple ourselves one way or the other. If we fall back, we will all live. If we fall into the present—we may die."

"Either way, it's better than this!" Miller said fervently.

"I came to the library here, hoping to find out the things I must know. My own books are locked in my study. And these—they might be cemented in their places, for all their use to me. I suppose we might as well go back to the lab."

Miller nodded, murmuring: "Maybe you'll get an idea when you look at the machine again."

"Let's hope so," said Erickson grimly. "God knows I've failed so far!"

CHAPTER III

Splendid Sacrifice

IT was a solid hour's walk out to West Wilshire, where the laboratory was. The immense bronze and glass doors of Wanamaker Institute were closed, and

so barred to the two men. But Erickson led the way down the side.

"We can get in a service door. Then we climb through transoms and ventilators until we get to my lab."

Major frisked along beside them. He was enjoying the action and the companionship. It was less of an adventure to Miller, who knew death might be ahead for the three of them.

Two workmen were moving a heavy cabinet in the side service door. To get in, they climbed up the back of the rear workman, walked across the cabinet, and scaled down the front of the leading man. They went up the stairs to the fifteenth floor. Here they crawled through a transom into the wing marked:

"Experimental. Enter Only By Appointment."

Major was helped through it, then they were crawling along the dark metal tunnel of an air-conditioning ventilator. It was small, and took some wriggling.

In the next room, they were confronted by a stern receptionist on whose desk was a little brass sign, reading:

"Have you an appointment?"

Miller had had his share of experience with receptionists' ways, in his days as a pharmaceutical salesman. He took the greatest pleasure now in lighting his cigarette from a match struck on the girl's nose. Then he blew the smoke in her face and hastened to crawl through the final transom.

John Erickson's laboratory was well lighted by a glass-brick wall and a huge skylight. The sun's rays glinted on the time impulsor.* The scientist explained the impulsor in concise terms. When he had finished, Dave Miller knew just as little as before, and the outfit still resembled three transformers in a line, of the type seen on power-poles, connected to a great bronze globe hanging from the ceiling.

"There's the monster that put us in this plight," Erickson grunted. "Too strong to be legal, too weak to do the job right."

WITH his hands jammed in his pockets, he frowned at the complex machinery. Miller stared a few moments; then transferred his interests to other things in the room. He was immediately struck by the resemblance of a transformer in a far corner to the ones linked up with the impulsor.

"What's that?" he asked quickly. "Looks the same as the ones you used over there."

"It is."

"But— Didn't you say all you needed was another stage of power?"

"That's right."

"Maybe I'm crazy!" Miller stared from impulsor to transformer and back again. "Why don't you use it, then?"

"Using what for the connection?" Erickson's eyes gently mocked him.

"Wire, of course!"

The scientist jerked a thumb at a small bale of heavy copper wire.

"Bring it over and we'll try it."

Miller was halfway to it when he brought up short. Then a sheepish grin spread over his features.

"I get it," he chuckled. "That bale of wire might be the Empire State Building, as far as we're concerned. Forgive my stupidity."

Erickson suddenly became serious.

*Obviously this electric time impulsor is a machine in the nature of an atomic integrator. It "broadcasts" great waves of electrons which align all atomic objects in rigid suspension.

That is to say, atomic structures are literally "frozen." Living bodies are similarly affected. It is a widely held belief on the part of many eminent scientists that all matter, broken down into its elementary atomic composition, is electrical in structure.

That being so, there is no reason to suppose why Professor Erickson may not have discovered a time impulsor which, broadasting electronic impulses, "froze" everything within its range.—Ed.

"I'd like to be optimistic, Dave," he muttered, "but in all fairness to you I must tell you I see no way out of this. The machine is, of course, still working, and with that extra stage of power, the uncertainty would be over. But where, in this world of immovable things, will we find a piece of wire twenty-five feet long?"

THERE was a warm, moist sensation against Miller's hand, and when he looked down Major stared up at him commiseratingly. Miller scratched him behind the ear, and the dog closed his eyes, reassured and happy. The young druggist sighed, wishing there were some giant hand to scratch him behind the ear and smooth *his* troubles over.

"And if we don't get out," he said soberly, "we'll starve, I suppose."

"No, I don't think it will be that quick. I haven't felt any hunger. I don't expect to. After all, our bodies are still living in one instant of time, and a man can't work up a healthy appetite in one second. Of course, this elastic-second business precludes the possibility of disease.

"Our bodies must go on unchanged. The only hope I see is—when we are on the verge of madness, suicide. That means jumping off a bridge, I suppose. Poison, guns, knives — all the usual wherewithal—are denied to us."

Black despair closed down on Dave Miller. He thrust it back, forcing a crooked grin.

"Let's make a bargain," he offered. "When we finish fooling around with this apparatus, we split up. We'll only be at each other's throats if we stick together. I'll be blaming you for my plight, and I don't want to. It's my fault as much as yours. How about it?"

John Erickson gripped his hand. "You're all right, Dave. Let me give you some advice. If ever you do get back to the present . . . keep away from liquor. Liquor and the Irish never did mix. You'll have that store on its feet again in no time."

"Thanks!" Miller said fervently. "And I think I can promise that nothing less than a whiskey antidote for snake bite will ever make me bend an elbow again!"

FOR the next couple of hours, despondency reigned in the laboratory. But it was soon to be deposed again by hope.

Despite all of Erickson's scientific training, it was Dave Miller himself who grasped the down-to-earth idea that started them hoping again. He was walking about the lab, jingling keys in his pocket, when suddenly he stopped short. He jerked the ring of keys into his hand.

"Erickson!" he gasped. "We've been blind. Look at this!"

The scientist looked; but he remained puzzled.

"Well—?" he asked skeptically.

"There's our wire!" Dave Miller exclaimed. "You've got keys; I've got keys. We've got coins, knives, wristwatches. Why can't we lay them all end to end—"

Erickson's features looked as if he had been electrically shocked.

"You've hit it!" he cried. "If we've just got enough!"

With one accord, they began emptying their pockets, tearing off wristwatches, searching for pencils. The finds made a little heap in the middle of the floor. Erickson let his long fingers claw through thinning hair.

"God give us enough! We'll only need the one wire. The thing is plugged in already and only the positive pole has to be connected to the globe. Come on!"

Scooping up the assortment of metal

articles, they rushed across the room. With his pocket-knife, Dave Miller began breaking up the metal wrist-watch straps, opening the links out so that they could be laid end-to-end for the greatest possible length. They broke the watches to pieces, and of the junk thus garnered made a ragged foot and a half of "wire". Their coins stretched the line still further.

They had ten feet covered before the stuff was half used up. Their metal pencils, taken apart, gave them a good two feet. Key chains helped generously. With eighteen feet covered, their progress began to slow down.

Perspiration poured down Miller's face. Desperately, he tore off his lodge ring and cut it in two to pound it flat. From garters and suspenders they won a few inches more. And then—they were stopped—feet from their goal.

Miller groaned. He tossed his pocket-knife in his hand.

"We can get a foot out of this," he estimated. "But that still leaves us 'way short."

Abruptly, Erickson snapped his fingers.

"Shoes!" he gasped. "They're full of nails. Get to work with that knife, Dave. We'll cut out every one of 'em!"

IN ten minutes, the shoes were reduced to ragged piles of tattered leather. Erickson's deft fingers painstakingly placed the nails, one by one, in the line. The distance left to cover was less than six inches!

He lined up the last few nails. Then both men were sinking back on their heels, as they saw there was a gap of three inches left to cover!

"Beaten!" Erickson ground out. "By three inches! Three inches from the present . . . and yet it might as well be a million miles!"

Miller's body felt as though it were in a vise. His muscles ached with strain. So taut were his nerves that he leaped as though stung when Major nuzzled a cool nose into his hand again. Automatically, he began to stroke the dog's neck.

"Well, that licks us," he muttered. "There isn't another piece of movable metal in the world."

Major kept whimpering and pushing against him. Annoyed, the druggist shoved him away.

"Go 'way," he muttered. "I don't feel like—"

Suddenly then his eyes widened, as his touch encountered warm metal. He whirled.

"There it is!" he yelled. "The last link. *The nameplate on Major's collar!*"

In a flash, he had torn the little rectangular brass plate from the dog collar. Erickson took it from his grasp. Sweat stood shiny on his skin. He held the bit of metal over the gap between wire and pole.

"This is it!" he smiled brittlely. "We're on our way, Dave. Where, I don't know. To death, or back to life. But—we're going!"

The metal clinked into place. Live, writhing power leaped through the wire, snarling across partial breaks. The transformers began to hum. The humming grew louder. Singing softly, the bronze globe over their heads glowed green. Dave Miller felt a curious lightness. There was a snap in his brain, and Erickson, Major and the laboratory faded from his senses.

Then came an interval when the only sound was the soft sobbing he had been hearing as if in a dream. That, and blackness that enfolded him like soft velvet. Then Miller was opening his eyes, to see the familiar walls of his own kitchen around him!

Someone cried out.

"Dave! Oh, Dave, dear!"

It was Helen's voice, and it was Helen who cradled his head in her lap and bent her face close to his.

"Oh, thank God you're alive—!"

"Helen!" Miller murmured. "What—are—you—doing here?"

"I couldn't go through with it. I—I just couldn't leave you. I came back and—and I heard the shot and ran in. The doctor should be here. I called him five minutes ago."

"*Five minutes* . . . How long has it been since I shot myself?"

"Oh, just six or seven minutes. I called the doctor right away."

Miller took a deep breath. Then it *must* have been a dream. All that—to happen in a few minutes— It wasn't possible!

"How—how could I have botched the job?" he muttered. "I wasn't drunk enough to miss myself completely."

Helen looked at the huge revolver lying in the sink with distaste.

"Oh, that old forty-five of Grandfather's! It hasn't been loaded since the Civil War. I guess the powder got damp or something. It just sort of sputtered instead of exploding properly. Dave, promise me something! You won't ever do anything like this again, if I promise not to nag you?"

Dave Miller closed his eyes. "There won't be any need to nag, Helen. Some people take a lot of teaching, but I've had my lesson. I've got ideas about the store which I'd been too lazy to try out. You know, I feel more like fighting right now than I have for years! We'll lick 'em, won't we, honey?"

Helen buried her face in the hollow of his shoulder and cried softly. Her words were too muffled to be intelligible But Dave Miller understood.

HE HAD thought the whole thing a dream—John Erickson, the "time impulsor" and Major. But that night he read an item in the *Evening Courier* that was to keep him thinking for many days.

POLICE INVESTIGATE
DEATH OF SCIENTIST
HERE IN LABORATORY

John M. Erickson, director of the Wanamaker Institute, died at his work last night. Erickson was a beloved and valuable figure in the world of science, famous for his recently publicized "time lapse" theory.

Two strange circumstances surrounded his death. One was the presence of a German shepherd dog in the laboratory, its head crushed as if with a sledgehammer. The other was a chain of small metal objects stretching from one corner of the room to the other, as if intended to take the place of wire in a circuit.

Police, however, discount this idea, as there was a roll of wire only a few feet from the body.

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under circumstances that *might* be due to natural death.

THE FABULOUS "CEMETERY"

As a result of this strange fact, the natives have many legends concerning a secret burying ground somewhere in the dense forests where all elephants migrate when they feel death approaching. Hundreds of hunters, black and white, have sacrificed their lives in a search for this fabulous "cemetery" that must contain a dozen fortunes in pure ivory.

A few researchers have suggested that perhaps elephants seek water when dying and that their huge carcasses sink into the mud and are hidden from sight almost immediately. But not even that natural explanation entirely solves the riddle, for it does not explain how elephants know of approaching death far enough in advance to locate such a waterhole, nor why they avoid water not surrounded by bottomless mud.

Only a few have dared to whisper the one other possible explanation. Could it be that if it were not for hunters, there would be no death among elephants in their wild state? Was that why nature, having created monsters without death, was forced to bring about a world catastrophe 12,000 years ago to keep them from overrunning the earth?

Who knows? Until the riddle of the giants has been unraveled, there can be no answer.

The Voyage That

Thirty generations would live and die before the *Flashaway* reached its destination. Could the one man who was to live on keep them to their purpose?

THEY gave us a gala send-off, the kind that keeps your heart bobbing up at your tonsils.

"It's a long, long way to the Milky Way!" the voices sang out. The band thundered the chorus over and over. The golden trumpaphones blasted our eardrums wide open. Thousands of people clapped their hands in time.

There were thirty-three of us—that is, there was supposed to be. As it turned out, there were thirty-five.

We were a dazzling parade of red, white and blue uniforms. We marched up the gangplank by couples, every couple a man and wife, every couple young and strong, for the selection had been rigid.

Captain Sperry and his wife and I—I being the odd man—brought up the rear. Reporters and cameramen swarmed at our heels. The microphones stopped us. The band and the crowd hushed.

"This is Captain Sperry telling you good-by" the amplified voice boomed. "In behalf of the thirty-three, I thank you for your grand farewell. We'll remember this hour as our last contact with our beloved Earth."

The crowd held its breath. The mighty import of our mission struck through every heart.

Lasted 600 Years

by DON WILCOX

Grimstone gripped his automatic tightly as he stepped from the animation machine

"We go forth into space to live—and to die," the captain said gravely. "But *our children's children,* born in space and reared in the light of our vision, will carry on our great purpose. And in centuries to come, *your children's children* may set forth for the Robinello planets, knowing that you will find an American colony already planted there."

The captain gestured good-by and the multitude responded with a thunderous cheer. Nothing so daring as a six-century nonstop flight had ever been undertaken before.

An announcer nabbed me by the sleeve and barked into the microphone,

"And now one final word from Professor Gregory Grimstone, the one man who is supposed to live down through the six centuries of this historic flight and see the journey through to the end."

"Ladies and gentlemen," I choked, and the echo of my swallow blobbed back at me from distant walls, "as Keeper of the Traditions, I give you my word that the S. S. *Flashaway* shall carry your civilization through to the end, unsoiled and unblemished!"

A cheer stimulated me and I drew a deep breath for a burst of oratory. But Captain Sperry pulled at my other sleeve.

"That's all. We're set to slide out in two minutes."

The reporters scurried down the gangplank and made a center rush through the crowd. The band struck up. Motors roared sullenly.

One lone reporter who had missed out on the interviews blitzkrieged up and caught me by the coattail.

"Hold it, Butch. Just a coupla words so I can whip up a column of froth for the *Star*— Well, I'll be damned! If it ain't 'Crackdown' Grimstone!"

I scowled. The reporter before me was none other than Bill Broscoe, one of my former pupils at college and a star athlete. At heart I knew that Bill was a right guy, but I'd be the last to tell him so.

"Broscoe!" I snarled. "Tardy as usual. You finally flunked my history course, didn't you?"

"Now, Crackdown," he whined, "don't go hopping on me. I won that Thanksgiving game for you, remember?"

HE gazed at my red, white and blue uniform.

"So you're off for Robinello," he grinned.

"Son, this is my last minute on Earth, and *you* have to haunt me, of all people—"

"So you're the one that's taking the refrigerated sleeper, to wake up every hundred years—"

"And stir the fires of civilization among the crew—yes. Six hundred years from now when your bones have rotted, I'll still be carrying on."

"Still teaching 'em history? God forbid!" Broscoe grinned.

"I hope I have better luck than I did with you."

"Let 'em off easy on dates, Crackdown. Give them 1066 for William the Conqueror and 2066 for the *Flashaway* take-off. That's enough. Taking your wife, I suppose?"

At this impertinent question I gave Broscoe the cold eye.

"Pardon me," he said, suppressing a sly grin—proof enough that he had heard the devastating story about how I missed my wedding and got the air. "Faulty alarm clock, wasn't it? Too bad, Crackdown. And you always ragged *me* about being tardy!"

With this jibe Broscoe exploded into laughter. Some people have the damnedest notions about what constitutes

humor. I backed into the entrance of the space ship uncomfortably. Broscoe followed.

Zzzzippp!

The automatic door cut past me. I jerked Broscoe through barely in time to keep him from being bisected.

"Tardy as usual, my friend," I hooted. "You've missed your gangplank! That makes you the first castaway in space."

We took off like a shooting star, and the last I saw of Bill Broscoe, he stood at a rear window cursing as he watched the earth and the moon fall away into the velvety black heavens. And the more I laughed at him, the madder he got. No sense of humor.

Was that the last time I ever saw him? Well, no, to be strictly honest I had one more unhappy glimpse of him.

It happened just before I packed myself away for my first one hundred years' sleep.

I had checked over the "Who's Who Aboard the *Flashaway*"—the official register—to make sure that I was thoroughly acquainted with everyone on board; for these sixteen couples were to be the great-grandparents of the next generation I would meet. Then I had promptly taken my leave of Captain Sperry and his wife, and gone directly to my refrigeration plant, where I was to suspend my life by instantaneous freezing.

I clicked the switches, and one of the two huge horizontal wheels—one in reserve, in the event of a breakdown—opened up for me like a door opening in the side of a gigantic doughnut, or better, a tubular merry-go-round. There was my nook waiting for me to crawl in.

Before I did so I took a backward glance toward the ballroom. The one-way glass partition, through which I could see but not be seen, gave me a clear view of the scene of merriment. The couples were dancing. The journey was off to a good start.

"A grand gang," I said to myself. No one doubted that the ship was equal to the six-hundred-year journey. The success would depend upon the people. Living and dying in this closely circumscribed world would put them to a severe test. All credit, I reflected, was due the planning committee for choosing such a congenial group.

"They're equal to it," I said optimistically. If their children would only prove as sturdy and adaptable as their parents, my job as Keeper of the Traditions would be simple.

BUT how, I asked myself, as I stepped into my life-suspension merry-go-round, would Bill Broscoe fit into this picture? Not a half bad guy. Still—

My final glance through the one-way glass partition slew me. Out of the throng I saw Bill Broscoe dancing past with a beautiful girl in his arms. The girl was Louise—*my* Louise—the girl I had been engaged to marry!

In a flash it came to me—but not about Bill. I forgot him on the spot. About Louise.

Bless her heart, she'd come to find me. She must have heard that I had signed up for the *Flashaway,* and she had come aboard, a stowaway, to forgive me for missing the wedding—to marry me! Now—

A warning click sounded, a lid closed over me, my refrigerator-merry-go-round whirled— Blackness!

CHAPTER II

Babies, Just Babies

IN a moment—or so it seemed—I was again gazing into the light of the refrigerating room. The lid stood open.

A stimulating w a r m t h circulated through my limbs. Perhaps the machine, I half consciously concluded, had made no more than a preliminary revolution.

I bounded out with a single thought. I must find Louise. We could still be married. For the present I would postpone my entrance into the ice. And since the machine had been equipped with *two* merry-go-round freezers as an emergency safeguard — ah! Happy thought—perhaps Louise would be willing to undergo life suspension with me!

I stopped at the one-way glass partition, astonished to see no signs of dancing in the ballroom. I could scarcely see the ballroom, for it had been darkened.

Upon unlocking the door (the refrigerator room was my own private retreat) I was bewildered. An unaccountable change had come over everything. What it was, I couldn't determine at the moment. But the very air of the ballroom was different.

A few dim green light bulbs burned along the walls—enough to show me that the dancers had vanished. Had time enough elapsed for night to come on? My thoughts spun dizzily. Night, I reflected, would consist simply of turning off the lights and going to bed. It had been agreed in our plan that our twenty-four hour Earth day would be maintained for the sake of regularity.

But there was something more intangible that struck me. The furniture had been changed about, and the very walls seemed *older*. Something more than minutes had passed since I left this room.

Strangest of all, the windows were darkened.

In a groggy state of mind I approached one of the windows in hopes of catching a glimpse of the solar system. I was still puzzling over how much time might have elapsed. Here, at least, was a sign of very recent activity.

"Wet Paint" read the sign pinned to the window. The paint was still sticky. What the devil—

The ship, of course, was fully equipped for blind flying. But aside from the problems of navigation, the crew had anticipated enjoying a wonderland of stellar beauty through the portholes. Now, for some strange reason, every window had been painted opaque.

I listened. Slow measured steps were pacing in an adjacent hallway. Nearing the entrance, I stopped, halted by a shrill sound from somewhere overhead. It came from one of the residential quarters that gave on the ballroom balcony.

It was the unmistakable wail of a baby.

Then another baby's cry struck up; and a third, from somewhere across the balcony, joined the chorus. Time, indeed, must have passed since I left this roomful of dancers.

Now some irate voices of disturbed sleepers added rumbling basses to the symphony of wailings. Grumbles of "Shut that little devil up!" and poundings of fists on walls thundered through the empty ballroom. In a burst of inspiration I ran to the records room, where the ship's "Who's Who" was kept.

THE door to the records room was locked, but the footsteps of some sleepless person I had heard now pounded down the dimly lighted hallway. I looked upon the aged man. I had never seen him before. He stopped at the sight of me; then snapping on a brighter light, came on confidently.

"Mr. Grimstone?" he said, extending

his hand. "We've been expecting you. My name is William Broscoe—"

"Broscoe!"

"William Broscoe, the second. You knew my father, I believe."

I groaned and choked.

"And my mother," the old man continued, "always spoke very highly of you. I'm proud to be the first to greet you."

He politely overlooked the flush of purple that leaped into my face. For a moment nothing that I could say was intelligible.

He turned a key and we entered the records room. There I faced the inescapable fact. My full century had passed. The original crew of the *Flashaway* were long gone. A completely new generation was on the register.

Or, more accurately, three new generations: the children, the grandchildren, and the great-grandchildren of the generation I had known.

One hundred years had passed—and I had lain so completely suspended, owing to the freezing, that only a moment of my own life had been absorbed.

Eventually I was to get used to this; but on this first occasion I found it utterly shocking — even embarrassing. Only a few minutes ago, as my experience went, I was madly in love with Louise and had hopes of yet marrying her.

But now — well, the leather-bound "Who's Who" told all. Louise had been dead twenty years. Nearly thirty children now alive aboard the S. S. *Flashaway* could claim her as their great-grandmother. These carefully recorded pedigrees proved it.

And the patriarch of that fruitful tribe had been none other than Bill Broscoe, the fresh young athlete who had always been tardy for my history class. I gulped as if I were swallowing a baseball.

Broscoe—tardy! And I had missed my second chance to marry Louise—by a full century!

My fingers turned the pages of the register numbly. William Broscoe II misinterpreted my silence.

"I see you are quick to detect our trouble," he said, and the same deep conscientious concern showed in his expression that I had remembered in the face of his mother, upon our grim meeting after my alarm clock had failed and I had missed my own wedding.

Trouble? Trouble aboard the S. S. *Flashaway*, after all the careful advance planning we had done, and after all our array of budgeting and scheduling and vowing to stamp our systematic ways upon the oncoming generations? This, we had agreed, would be the world's most unique colonizing expedition; for every last trouble that might crop up on the six-hundred-year voyage had already been met and conquered by advance planning.

"They've tried to put off doing anything about it until your arrival," Broscoe said, observing respectfully that the charter invested in me the authority of passing upon all important policies. "But this very week three new babies arrived, which brings the trouble to a crisis. So the captain ordered a blackout of the heavens as an emergency measure."

"HEAVENS?" I grunted. "What have the heavens got to do with babies?"

"There's a difference of opinion on that. Maybe it depends upon how susceptible you are."

"Susceptible—to what?"

"The romantic malady."

I looked at the old man, much puzzled. He took me by the arm and led me toward the pilots' control room. Here were unpainted windows that re-

vealed celestial glories beyond anything I had ever dreamed. Brilliant planets of varied hues gleamed through the blackness, while close at hand—almost close enough to touch — were numerous large moons, floating slowly past as we shot along our course.

"Some little show," the pilot grinned, "and it keeps getting better."

He proceeded to tell me just where we were and how few adjustments in the original time schedules he had had to make, and why this non-stop flight to Robinello would stand unequalled for centuries to come.

And I heard virtually nothing of what he said. I simply stood there, gazing at the unbelievable beauty of the skies. I was hypnotized, enthralled, shaken to the very roots. One emotion, one thought dominated me. I longed for Louise.

"The romantic malady, as I was saying," William Broscoe resumed, "may or may not be a factor in producing our large population. Personally, I think it's pure buncombe."

"Pure buncombe," I echoed, still thinking of Louise. If she and I had had moons like these—

"But nobody can tell Captain Dickinson anything . . ."

There was considerable clamor and wrangling that morning as the inhabitants awakened to find their heavens blacked out. Captain Dickinson was none too popular anyway. Fortunately for him, many of the people took their grouches out on the babies who had caused the disturbance in the night.

Families with babies were supposed to occupy the rear staterooms—but there weren't enough rear staterooms. Or rather, there were too many babies.

Soon the word went the rounds that the Keeper of the Traditions had returned to life. I was duly banqueted and toasted and treated to lengthy accounts of the events of the past hundred years. And during the next few days many of the older men and women would take me aside for private conferences and spill their worries into my ears.

CHAPTER III

Boredom

"WHAT'S the world coming to?" these granddaddies and grandmothers would ask. And before I could scratch my head for an answer, they would assure me that this expedition was headed straight for the rocks.

"It's all up with us. We've lost our grip on our original purposes. The Six-Hundred-Year Plan is nothing but a dead scrap of paper."

I'll admit things looked plenty black. And the more parlor conversations I was invited in on, the blacker things looked. I couldn't sleep nights.

"If our population keeps on increasing, we'll run out of food before we're halfway there," William Broscoe II repeatedly declared. "We've got to have a compulsory program of birth control. That's the only thing that will save us."

A delicate subject for parlor conversations, you think? This older generation didn't think so. I was astonished, and I'll admit I was a bit proud as well, to discover how deeply imbued these old graybeards were with *Flashaway* determination and patriotism. They had missed life in America by only one generation, and they were unquestionably the staunchest of flag wavers on board.

The younger generations were less outspoken, and for the first week I began to deplore their comparative lack of vision. They, the possessors of families, seemed to avoid these discussions about the oversupply of children.

"So you've come to check up on our

American traditions, Professor Grimstone," they would say casually. "We've heard all about this great purpose of our forefathers, and I guess it's up to us to put it across. But gee whiz, Grimstone, we wish we could have seen the earth! What's it like, anyhow?"

"Tell us some more about the earth . . ."

"All we know is what we get second hand . . ."

I told them about the earth. Yes, they had books galore, and movies and phonograph records, pictures and maps; but these things only excited their curiosity. They asked me questions by the thousands. Only after I had poured out several encyclopedia-loads of Earth memories did I begin to break through their masks.

Back of this constant questioning, I discovered, they were watching me. Perhaps they were wondering whether they were not being subjected to more rigid discipline here on shipboard than their cousins back on Earth. I tried to impress upon them that they were a chosen group, but this had little effect. It stuck in their minds that *they* had had no choice in the matter.

Moreover, they were watching to see what I was going to do about the population problem, for they were no less aware of it than their elders.

Two weeks after my "return" we got down to business.

Captain Dickinson preferred to engineer the matter himself. He called an assembly in the movie auditorium. Almost everyone was present.

The program began with the picture of the Six-Hundred-Year Plan. Everyone knew the reels by heart. They had seen and heard them dozens of times, and were ready to snicker at the proper moments—such as when the stern old committee chairman, charging the unborn generations with their solemn obligations, was interrupted by a friendly fly on his nose.

WHEN the films were run through, Captain Dickinson took the rostrum, and with considerable bluster he called upon the Clerk of the Council to review the situation. The clerk read a report which went about as follows:

To maintain a stable population, it was agreed in the original Plan that families should average two children each. Hence, the original 16 families would bring forth approximately 32 children; and assuming that they were fairly evenly divided as to sex, they would eventually form 16 new families. These 16 families would, in turn, have an average of two children each—another generation of approximately 32.

By maintaining these averages, we were to have a total population, at any given time, of 32 children, 32 parents and 32 grandparents. The great-grandparents may be left out of account, for owing to the natural span of life they ordinarily die off before they accumulate in any great numbers.

The three living generations, then, of 32 each would give the *Flashaway* a constant active population of 96, or roughly, 100 persons.

The Six-Hundred-Year Plan has allowed for some flexibility in these figures. It has established the safe maximum at 150 and the safe minimum at 75.

If our population shrinks below 75, it is dangerously small. If it shrinks to 50, a crisis is at hand.

But if it grows above 150, it is dangerously large; and if it reaches the 200 mark, as we all know, a crisis may be said to exist.

The clerk stopped for an impressive pause, marred only by the crying of a baby from some distant room.

"Now, coming down to the present-day facts, we are well aware that the population has been dangerously large for the past seven years—"

"Since we entered this section of the heavens," Captain Dickinson inter-

spersed with a scowl.

"From the first year in space, the population plan has encountered some irregularities," the clerk continued. "To begin with, there were not sixteen couples, but seventeen. The seventeenth couple—" here the clerk shot a glance at William Broscoe—"did not belong to the original compact, and after their marriage they were not bound by the sacred traditions—"

"I object!" I shouted, challenging the eyes of the clerk and the captain squarely. Dickinson had written that report with a touch of malice. The clerk skipped over a sentence or two.

"But however the Broscoe family may have prospered and multiplied, our records show that nearly all the families of the present generation have exceeded the per-family quota."

At this point there was a slight disturbance in the rear of the auditorium. An anxious-looking young man entered and signalled to the doctor. The two went out together.

"*All* the families," the clerk amended. "Our population this week passed the two hundred mark. This concludes the report."

The captain opened the meeting for discussion, and the forum lasted far into the night. The demand for me to assist the Council with some legislation was general. There was also hearty sentiment against the captain's blacked-out heavens from young and old alike.

THIS, I considered, was a good sign. The children craved the fun of watching the stars and planets; their elders desired to keep up their serious astronomical studies.

"Nothing is so important to the welfare of this expedition," I said to the Council on the following day, as we settled down to the job of thrashing out some legislation, "as to maintain our interests in the outside world. Population or no population, we must not become ingrown!"

I talked of new responsibilities, new challenges in the form of contests and campaigns, new leisure-time activities. The discussion went on for days.

"Back in my times—", I said for the hundredth time; but the captain laughed me down. My times and these times were as unlike as black and white, he declared.

"But the principle is the same!" I shouted. "We had population troubles, too."

They smiled as I referred to twenty-first century relief families who were overrun with children. I cited the fact that some industrialists who paid heavy taxes had considered giving every relief family an automobile as a measure to save themselves money in the long run; for they had discovered that relief families with cars had fewer children than those without.

"That's no help," Dickinson muttered. "You can't have cars on a space ship."

"You can play bridge," I retorted. "Bridge is an enemy of the birthrate too. Bridge, cars, movies, checkers—they all add up to the same thing. They lift you out of your animal natures—"

The Councilmen threw up their hands. They had bridged and checkered themselves to death.

"Then try other things," I persisted. "You could produce your own movies and plays—organize a little theater—create some new drama—"

"What have we got to dramatize?" the captain replied sourly. "All the dramatic things happen on the earth."

This shocked me. Somehow it took all the starch out of this colossal adventure to hear the captain give up so easily.

"All our drama is second hand," he

grumbled. "Our ship's course is cut and dried. Our world is bounded by walls. The only dramatic things that happen here are births and deaths."

A doctor broke in on our conference and seized the captain by the hand.

"Congratulations, Captain Dickinson, on the prize crop of the season! Your wife has just presented you with a fine set of triplets—three boys!"

That broke up the meeting. Captain Dickinson was so busy for the rest of the week that he forgot all about his official obligations. The problem of population limitation faded from his mind.

I wrote out my recommendations and gave them all the weight of my dictatorial authority. I stressed the need for more birth control forums, and recommended that the heavens be made visible for further studies in astronomy and mathematics.

I was tempted to warn Captain Dickinson that the *Flashaway* might incur some serious dramas of its own—poverty, disease and the like—unless he got back on the track of the Six-Hundred-Year Plan in a hurry. But Dickinson was preoccupied with some family washings when I took my leave of him, and he seemed to have as much drama on his hands as he cared for.

I paid a final visit to each of the twenty-eight great-grandchildren of Louise, and returned to my ice.

CHAPTER IV

Revolt!

MY chief complaint against my merry-go-round freezer was that it didn't give me any rest. One whirl into blackness, and the next thing I knew I popped out of the open lid again with not so much as a minute's time to reorganize my thoughts.

Well, here it was, 2266—two hundred years since the take-off.

A glance through the one-way glass told me it was daytime in the ballroom.

As I turned the key in the lock I felt like a prize fighter on a vaudeville tour who, having just trounced the tough local strong man, steps back in the ring to take on his cousin.

A touch of a headache caught me as I reflected that there should be four more returns after this one—if all went according to plan. *Plan!* That word was destined to be trampled underfoot!

Oh, well (I took a deep optimistic breath) the *Flashaway* troubles would all be cleared up by now. Three generations would have passed. The population should be back to normal.

I swung the door open, stepped through, locked it after me.

For an instant I thought I had stepped in on a big movie "take"—a scene of a stricken multitude. The big ballroom was literally strewn with people—if creatures in such a deplorable state could be called people.

There was no movie camera. This was the real thing.

"Grimstone's come!" a hoarse voice cried out.

"Grimstone! Grimstone!" Others caught up the cry. Then — "Food! Give us food! We're starving! For God's sake—"

The weird chorus gathered volume. I stood dazed, and for an instant I couldn't realize that I was looking upon the population of the *Flashaway*.

Men, women and children of all ages and all states of desperation joined in the clamor. Some of them stumbled to their feet and came toward me, waving their arms weakly. But most of them hadn't the strength to rise.

In that stunning moment an icy sweat came over me.

"Food! Food! We've been wait-

ing for you, Grimstone. We've been holding on—"

The responsibility that was strapped to my shoulders suddenly weighed down like a locomotive. You see, I had originally taken my job more or less as a lark. That Six-Hundred-Year Plan had looked so air-tight. I, the Keeper of the Traditions, would have a snap.

I had anticipated many a pleasant hour acquainting the oncoming generations with noble sentiments about George Washington; I had pictured myself filling the souls of my listeners by reciting the Gettysburg address and lecturing upon the mysteries of science.

But now those pretty bubbles burst on the spot, nor did they ever re-form in the centuries to follow.

And as they burst, my vision cleared. My job had nothing to do with theories or textbooks or speeches. My job was simply to get to Robinello—to get there with enough living, able-bodied, sane human beings to start a colony.

Dull blue starlight sifted through the windows to highlight the big roomful of starved figures. The mass of pale blue faces stared at me. There were hundreds of them. Instinctively I shrank as the throng clustered around me, calling and pleading.

"One at a time!" I cried. "First I've got to find out what this is all about. Who's your spokesman?"

THEY designated a handsomely built, if undernourished, young man. I inquired his name and learned that he was Bob Sperry, a descendant of the original Captain Sperry.

"There are eight hundred of us now," Sperry said.

"Don't tell me the food has run out!"

"No, not that—but six hundred of us are not entitled to regular meals."

"Why not?"

Before the young spokesman could answer, the others burst out with an unintelligible clamor. Angry cries of "That damned Dickinson!" and "Guns!" and "They'll shoot us!" were all I could distinguish.

I quieted them and made Bob Sperry go on with his story. He calmly asserted that there was a very good reason that they shouldn't be fed, all sentiment aside; namely, because they had been born outside the quota.

Here I began to catch a gleam of light.

"By Captain Dickinson's interpretation of the Plan," Sperry explained, "there shouldn't be more than two hundred of us altogether."

This Captain Dickinson, I learned, was a grandson of the one I had known.

Sperry continued, "Since there are eight hundred, he and his brother—his brother being Food Superintendent—launched an emergency measure a few months ago to save food. They divided the population into the two hundred, who had a right to be born, and the six hundred who had not."

So the six hundred starving persons before me were theoretically the excess population. The vigorous ancestry of the sixteen — no, seventeen — original couples, together with the excellent medical care that had reduced infant mortality and disease to the minimum, had wrecked the original population plan completely.

"What do you do for food? You must have *some* food!"

"We live on charity."

The throng again broke in with hostile words. Young Sperry's version was too gentle to do justice to their outraged stomachs. In fairness to the two hundred, however, Sperry explained that they shared whatever food they could spare with these, their less fortunate brothers, sisters and offspring.

Uncertain what should or could be

done, I gave the impatient crowd my promise to investigate at once. Bob Sperry and nine other men accompanied me.

The minute we were out of hearing of the ballroom, I gasped,

"Good heavens, men, how is it that you and your six hundred haven't mobbed the storerooms long before this?"

"Dickinson and his brother have got the drop on us."

"Drop? What kind of drop?"

"Guns!"

I couldn't understand this. I had believed these new generations of the *Flashaway* to be relatively innocent of any knowledge of firearms.

"What kind of guns?"

"The same kind they use in our Earth-made movies—that make a loud noise and kill people by the hundreds."

"But there aren't any guns aboard! That is—"

I knew perfectly well that the only firearms the ship carried had been stored in my own refrigerator room, which no one could enter but myself. Before the voyage, one of the planning committee had jestingly suggested that if any serious trouble ever arose, I should be master of the situation by virtue of one hundred revolvers.

"They made their own guns," Sperry explained, "just like the ones in our movies and books."

INQUIRING whether any persons had been shot, I learned that three of their number, attempting a raid on the storerooms, had been killed.

"We heard three loud bangs, and found our men dead with bloody skulls."

Reaching the upper end of the central corridor, we arrived at the captain's headquarters.

The name of Captain Dickinson carried a bad flavor for me. A century before I had developed a distaste for a certain other Captain Dickinson, his grandfather. I resolved to swallow my prejudice. Then the door opened, and my resolve stuck in my throat. The former Captain Dickinson had merely annoyed me; but this one I hated on sight.

"Well?" the captain roared at the eleven of us.

Well-uniformed and neatly groomed, he filled the doorway with an impressive bulk. In his right hand he gripped a revolver. The gleam of that weapon had a magical effect upon the men. They shrank back respectfully. Then the captain's cold eye lighted on me.

"Who are *you?*"

"Gregory Grimstone, Keeper of the Traditions."

The captain sent a quick glance toward his gun and repeated his "Well?"

For a moment I was fascinated by that intricately shaped piece of metal in his grip.

"Well!" I echoed. "If 'well' is the only reception you have to offer, I'll proceed with my official business. Call your Food Superintendent."

"Why?"

"Order him out! Have him feed the entire population without further delay!"

"We can't afford the food," the captain growled.

"We'll talk that over later, but we won't talk on empty stomachs. Order out your Food Superintendent!"

"Crawl back in your hole!" Dickinson snarled.

At that instant another bulky man stepped into view. He was almost the identical counterpart of the captain, but his uniform was that of the Food Superintendent. Showing his teeth with a sinister snarl, he took his place beside

his brother. He too jerked his right hand up to flash a gleaming revolver.

I caught one glimpse—and laughed in his face! I couldn't help it.

"You fellows are good!" I roared. "You're damned good actors! If you've held off the starving six hundred with nothing but those two dumb imitations of revolvers, you deserve an Academy award!"

The two Dickinson brothers went white.

Back of me came low mutterings from ten starving men.

"Imitations—dumb imitations—what the hell?"

Sperry and his nine comrades plunged with one accord. For the next ten minutes the captain's headquarters was simply a whirlpool of flying fists and hurtling bodies.

I have mentioned that these ten men were weak from lack of food. That fact was all that saved the Dickinson brothers; for ten minutes of lively exercise was all the ten men could endure, in spite of the circumstances.

BUT ten minutes left an impression. The Dickinsons were the worst beaten-up men I have ever seen, and I have seen some bad ones in my time. When the news echoed through the ship, no one questioned the ethics of ten starved men attacking two overfed ones.

Needless to say, before two hours passed, every hungry man, woman and child ate to his gizzard's content. And before another hour passed, some new officers were installed. The S. S. *Flashaway's* trouble was far from solved; but for the present the whole eight hundred were one big family picnic. Hope was restored, and the rejoicing lasted through many thousand miles of space.

There was considerable mystery about the guns. Surprisingly, the people had developed an awe of the movie guns as if they were instruments of magic.

Upon investigating, I was convinced that the captain and his brother had simply capitalized on this superstition. They had a sound enough motive for wanting to save food. But once their gun bluff had been established, they had become uncompromising oppressors. And when the occasion arose that their guns were challenged, they had simply crushed the skulls of their three attackers and faked the noises of explosions.

But now the firearms were dead. And so was the Dickinson regime.

But the menacing problem of too many mouths to feed still clung to the S. S. *Flashaway* like a hungry ghost determined to ride the ship to death.

Six full months passed before the needed reform was forged.

During that time everyone was allowed full rations. The famine had already taken its toll in weakened bodies, and seventeen persons—most of them young children—died. The doctors, released from the Dickinson regime, worked like Trojans to bring the rest back to health.

The reform measure that went into effect six months after my arrival consisted of outright sterilization.

The compulsory rule was sterilization for everyone except those born "within the quota"—and that quota, let me add, was narrowed down one half from Captain Dickinson's two hundred to the most eligible one hundred. The disqualified one hundred now joined the ranks of the six hundred.

And that was not all. By their own agreement, every within-the-quota family, responsible for bearing the *Flashaway's* future children, would undergo sterilization operations after the second child was born.

The seven hundred out-of-quota citizens, let it be said, were only too glad

to submit to the simple sterilization measures in exchange for a right to live their normal lives. Yes, they were to have three squares a day. With an assured population decline in prospect for the coming century, this generous measure of food would not give out. Our surveys of the existing food supplies showed that these seven hundred could safely live their four-score years and die with full stomachs.

Looking back on that six months' work, I was fairly well satisfied that the doctors and the Council and I had done the fair, if drastic, thing. If I had planted seeds for further trouble with the Dickinson tribe, I was little concerned about it at the time.

My conscience was, in fact, clear—except for one small matter. I was guilty of one slight act of partiality.

I incurred this guilt shortly before I returned to the ice. The doctors and I, looking down from the balcony into the ballroom, chanced to notice a young couple who were obviously very much in love.

THE young man was Bob Sperry, the handsome, clear-eyed descendant of the *Flashaway's* first and finest captain, the lad who had been the spokesman when I first came upon the starving mob.

The girl's name—and how it had clung in my mind!—was Louise Broscoe. Refreshingly beautiful, she reminded me for all the world of my own Louise (mine and Bill Broscoe's).

"It's a shame," one of the doctors commented, "that fine young blood like that has to fall outside the quota. But rules are rules."

With a shrug of the shoulders he had already dismissed the matter from his mind—until I handed him something I had scribbled on a piece of paper.

"We'll make this one exception," I said perfunctorily. "If any question ever arises, this statement relieves you doctors of all responsibility. This is my own special request."

CHAPTER V

Wedding Bells

ONE hundred years later my rash act came back to haunt me—and how! Bob Sperry had married Louise Broscoe, and the births of their two children had raised the unholy cry of "Favoritism!"

By the year 2366, Bob Sperry and Louise Broscoe were gone and almost forgotten. But the enmity against me, the Keeper of the Traditions who played favorites, had grown up into a monster of bitter hatred waiting to devour me.

It didn't take me long to discover this. My first contact after I emerged from the ice set the pace.

"Go tell your parents," I said to the gang of brats that were playing ball in the spacious ballroom, "that Grimstone has arrived."

Their evil little faces stared at me a moment, then they snorted.

"Faw! Faw! Faw!" and away they ran.

I stood in the big bleak room wondering what to make of their insults. On the balcony some of the parents craned over the railings at me.

"Greetings!" I cried. "I'm Grimstone, Keeper of the Traditions. I've just come—"

"Faw!" the men and women shouted at me. "Faw! Faw!"

No one could have made anything friendly out of those snarls. "Faw," to them, was simply a vocal manner of spitting poison.

Uncertain what this surly reception might lead to, I returned to my refrig-

erator room to procure one of the guns. Then I returned to the volley of catcalls and insults, determined to carry out my duties, come what might.

When I reached the forequarter of the ship, however, I found some less hostile citizens who gave me a civil welcome. Here I established myself for the extent of my 2366-67 sojourn, an honored guest of the Sperry family.

This, I told myself, was my reward for my favor to Bob Sperry and Louise Broscoe a century ago. For here was their grandson, a fine upstanding gray-haired man of fifty, a splendid pilot and the father of a beautiful twenty-one year old daughter.

"Your name wouldn't be Louise by any chance?" I asked the girl as she showed me into the Sperry living room.

"Lora-Louise," the girl smiled. It was remarkable how she brought back memories of one of her ancestors of three centuries previous.

Her dark eyes flashed over me curiously.

"So you are the man that we Sperries have to thank for being here!"

"You've heard about the quotas?" I asked.

"Of course. You're almost a god to our family."

"I must be a devil to some of the others," I said, recalling my reception of catcalls.

"Rogues!" the girl's father snorted, and he thereupon launched into a breezy account of the past century.

The sterilization program, he assured me, had worked—if anything, too well. The population was the lowest in *Flashaway* history. It stood at the dangerously low mark of *fifty!*

Besides the sterilization program, a disease epidemic had taken its toll. In addition three ugly murders, prompted by jealousies, had spotted the record. And there had been one suicide.

As to the character of the population, Pilot Sperry declared gravely that there had been a turn for the worse.

"They fight each other like damned anarchists," he snorted.

THE Dickinsons had made trouble for several generations. Now it was the Dickinsons against the Smiths; and these two factions included four-fifths of all the people. They were about evenly divided—twenty on each side—and when they weren't actually fighting each other, they were "fawing" at each other.

These bellicose factions had one sentiment in common: they both despised the Sperry faction. And—here my guilt cropped up again — their hatred stemmed from my special favor of a century ago, without which there would be no Sperrys now. In view of the fact that the Sperry faction lived in the forequarter of the ship and held all the important offices, it was no wonder that the remaining forty citizens were jealous.

All of which gave me enough to worry about. On top of that, Lora-Louise's mother gave me one other angle of the set-up.

"The trouble between the Dickinsons and the Smiths has grown worse since Lora-Louise has become a young lady," Mrs. Sperry confided to me.

We were sitting in a breakfast nook. Amber starlight shone softly through the porthole, lighting the mother's steady imperturbable gray eyes.

"Most girls have married at eighteen or nineteen," her mother went on. "So far, Lora-Louise has refused to marry."

The worry in Mrs. Sperry's face was almost imperceptible, but I understood. I had checked over the "Who's Who" and I knew the seriousness of this population crisis. I also knew that there were four young unmarried men with no

other prospects of wives except Lora-Louise.

"Have you any choice for her?" I asked.

"Since she must marry—and I know she *must*—I have urged her to make her own choice."

I could see that the ordeal of choosing had been postponed until my coming, in hopes that I might modify the rules. But I had no intention of doing so. The *Flashaway* needed Lora-Louise. It needed the sort of children she would bear.

That week I saw the two husky Dickinson boys. Both were in their twenties. They stayed close together and bore an air of treachery and scheming. Rumor had it that they carried weapons made from table knives.

Everyone knew that my coming would bring the conflict to a head. Many thought I would try to force the girl to marry the older Smith—"Batch", as he was called in view of his bachelorhood. He was past thirty-five, the oldest of the four unmarried men.

But some argued otherwise. For Batch, though a splendid specimen physically, was slow of wit and speech. It was common knowledge that he was weak-minded.

For that reason, I might choose his younger cousin, "Smithy," a roly-poly overgrown boy of nineteen who spent his time bullying the younger children.

But if the Smiths and the Dickinsons could have their way about it, the Keeper of the Traditions should have no voice in the matter. Let me insist that Lora-Louise marry, said they; but whom she should marry was none of my business.

They preferred a fight as a means of settlement. A free-for-all between the two factions would be fine. A showdown of fists among the four contenders would be even better.

BEST of all would be a battle of knives that would eliminate all but one of the suitors. Not that either the Dickinsons or the Smiths needed to admit that was what they preferred; but their barbaric tastes were plain to see.

Barbarians! That's what they had become. They had sprung too far from their native civilization. Only the Sperry faction, isolated in their monasteries of control boards, physicians' laboratories and record rooms, kept alive the spark of civilization.

The Sperrys and their associates were human beings out of the twenty-first century. The Smiths and the Dickinsons had slipped. They might have come out of the Dark Ages.

What burned me up more than anything else was that obviously both the Smiths and the Dickinsons looked forward with sinister glee toward dragging Lora-Louise down from her height to their own barbaric levels.

One night I was awakened by the sharp ringing of the pilot's telephone. I heard the snap of a switch. An *emergency* signal flashed on throughout the ship.

Footsteps were pounding toward the ballroom. I slipped into a robe, seized my gun, made for the door.

"The Dickinsons are murdering up on them!" Pilot Sperry shouted to me from the door of the control room.

"I'll see about it," I snapped.

I bounded down the corridor. Sperry didn't follow. Whatever violence might occur from year to year within the hull of the *Flashaway*, the pilot's code demanded that he lock himself up at the controls and tend to his own business.

It was a free-for-all! Under the bright lights they were going to it, tooth and toenail.

Children screamed and clawed, women hurled dishes, old tottering granddaddies edged into the fracas to crack

at each other with canes.

The appalling reason for it all showed in the center of the room—the roly-poly form of young "Smithy" Smith. Hacked and stabbed, his nightclothes ripped, he was a veritable mess of carnage.

I shouted for order. No one heard me, for in that instant a chase thundered on the balcony. Everything else stopped. All eyes turned on the three racing figures.

Batch Smith, fleeing in his white nightclothes, had less than five yards' lead on the two Dickinsons. Batch was just smart enough to run when he was chased, not smart enough to know he couldn't possibly outrun the younger Dickinsons.

As they shot past blazing lights the Dickinsons' knives flashed. I could see that their hands were red with Smithy's blood.

"Stop!" I cried. "Stop or I'll *shoot!"*

If they heard, the words must have been meaningless. The younger Dickinson gained ground. His brother darted back in the opposite direction, crouched, waited for his prey to come around the circular balcony.

"Dickinson! Stop or I'll shoot you dead!" I bellowed.

Batch Smith came on, his eyes white with terror. Crouched and waiting, the older Dickinson lifted his knife for the killing stroke.

I shot.

The crouched Dickinson fell in a heap. Over him tripped the racing form of Batch Smith, to sprawl headlong. The other Dickinson leaped over his brother and pounced down upon the fallen prey, knife upraised.

Another shot went home.

Young Dickinson writhed and came toppling down over the balcony rail. He lay where he fell, his bloody knife sticking up through the side of his neck.

IT was ugly business trying to restore order. However, the magic power of firearms, which had become only a dusty legend, now put teeth into every word I uttered.

The doctors were surprisingly efficient. After many hours of work behind closed doors, they released their verdicts to the waiting groups. The elder Dickinson, shot through the shoulder, would live. The younger Dickinson was dead. So was Smithy. But his cousin, Batch Smith, although too scared to walk back to his stateroom, was unhurt.

The rest of the day the doctors devoted to patching up the minor damages done in the free fight. Four-fifths of the *Flashaway* population were burdened with bandages, it seemed. For some time to come both the warring parties were considerably sobered over their losses. But most of all they were disgruntled because the fight had settled nothing.

The prize was still unclaimed. The two remaining contenders, backed by their respective factions, were at a bitter deadlock.

Nor had Lora-Louise's hatred for either the surviving Dickinson or Smith lessened in the slightest.

Never had a duty been more oppressive to me. I postponed my talk with Lora-Louise for several days, but I was determined that there should be no more fighting. She must choose.

We sat in an alcove next to the pilot's control room, looking out into the vast sky. Our ship, bounding at a terrific speed though it was, seemed to be hanging motionless in the tranquil star-dotted heavens.

"I must speak frankly," I said to the girl. "I hope you will do the same."

She looked at me steadily. Her dark eyes were perfectly frank, her full lips smiled with child-like simplicity.

"How old are you?" she asked.

"Twenty-eight," I answered. I'd been the youngest professor on the college faculty. "Or you might say three hundred and twenty-eight. Why?"

"How soon must you go back to your sleep?"

"Just as soon as you are happily married. That's why I must insist that you—"

Something very penetrating about her gaze made my words go weak. To think of forcing this lovely girl—so much like the Louise of my own century—to marry either the brutal Dickinson or the moronic Smith—

"Do you really want me to be *happily* married?" she asked.

I don't remember that any more words passed between us at the time.

A few days later she and I were married—and most happily!

The ceremony was brief. The entire Sperry faction and one representative from each of the two hostile factions were present. The aged captain of the ship, who had been too ineffectual in recent years to apply any discipline to the fighting factions, was still able with vigorous voice to pronounce us man and wife.

A year and a half later I took my leave.

I bid fond good-by to the "future captain of the *Flashaway*," who lay on a pillow kicking and squirming. He gurgled back at me. If the boasts and promises of the Sperry grandparents and their associates were to be taken at full value, this young prodigy of mine would in time become an accomplished pilot and a skilled doctor as well as a stern but wise captain.

Judging from his talents at the age of six months, I was convinced he showed promise of becoming Food Superintendent as well.

I left reluctantly but happily.

CHAPTER VI

The Final Crisis

THE year 2466 was one of the darkest in my life. I shall pass over it briefly.

The situation I found was all but hopeless.

The captain met me personally and conveyed me to his quarters without allowing the people to see me.

"Safer for everyone concerned," he muttered. I caught glimpses as we passed through the shadows. I seemed to be looking upon ruins.

Not until the captain had disclosed the events of the century did I understand how things could have come to such a deplorable state. And before he finished his story, I saw that I was helpless to right the wrongs.

"They've destroyed 'most everything," the hard-bitten old captain rasped. "And they haven't overlooked *you*. They've destroyed you completely. *You are an ogre.*"

I wasn't clear on his meaning. Dimly in the back of my mind the hilarious farewell of four centuries ago still echoed.

"The *Flashaway* will go through!" I insisted.

"They destroyed all the books, phonograph records, movie films. They broke up clocks and bells and furniture—"

And I was supposed to carry this interspatial outpost of American civilization through *unblemished!* That was what I had promised so gayly four centuries ago.

"They even tried to break out the windows," the captain went on. " 'Oxygen be damned!' they'd shout. They were mad. You couldn't tell them anything. If they could have got into this end of the ship, they'd have murdered

us and smashed the control boards to hell."

I listened with bowed head.

"Your son tried like the devil to turn the tide. But God, what chance did he have? The dam had busted loose. They wanted to kill each other. They wanted to destroy each other's property and starve each other out. No captain in the world could have stopped either faction. They had to get it out of their systems . . ."

He shrugged helplessly. "Your son went down fighting . . ." For a time I could hear no more. It seemed but minutes ago that I had taken leave of the little tot.

The war—if a mania of destruction and murder between two feuding factions could be called a war—had done one good thing, according to the captain. It had wiped the name of Dickinson from the records.

Later I turned through the musty pages to make sure. There were Smiths and Sperrys and a few other names still in the running, but no Dickinsons. Nor were there any Grimstones. My son had left no living descendants.

To return to the captain's story, the war (he said) had degraded the bulk of the population almost to the level of savages. Perhaps the comparison is an insult to the savage. The instruments of knowledge and learning having been destroyed, beliefs gave way to superstitions, memories of past events degenerated into fanciful legends.

The rebound from the war brought a terrific superstitious terror concerning death. The survivors crawled into their shells, almost literally; the brutalities and treacheries of the past hung like storm clouds over their imaginations.

As year after year dropped away, the people told and retold the stories of destruction to their children. Gradually the legend twisted into a strange form in which all the guilt for the carnage *was placed upon me!*

I WAS the one who had started all the killing! *I, the ogre,* who slept in a cave somewhere in the rear of the ship, came out once upon a time and started all the trouble!

I, the Traditions Man, dealt death with a magic weapon; I cast the spell of killing upon the Smiths and the Dickinsons that kept them fighting until there was nothing left to fight for!

"But that was years ago," I protested to the captain. "Am I still an ogre?" I shuddered at the very thought.

"More than ever. Stories like that don't die out in a century. They grow bigger. You've become the symbol of evil. I've tried to talk the silly notion down, but it has been impossible. My own family is afraid of you."

I listened with sickening amazement. I was the Traditions Man; or rather, the "Traddy Man"—the bane of every child's life.

Parents, I was told, would warn them, "If you don't be good, the Traddy Man will come out of his cave and get you!"

And the Traddy Man, as every grown-up knew, could storm out of his cave without warning. He would come with a strange gleam in his eye. That was his evil will. When the bravest, strongest men would cross his path, he would hurl instant death at them. Then he would seize the most beautiful woman and marry her.

"Enough!" I said. "Call your people together. I'll dispel their false ideas—"

The captain shook his head wisely. He glanced at my gun.

"Don't force me to disobey your orders," he said. "I can believe you're not an ogre—but they won't. I know this generation. You don't. Frankly, I

refuse to disturb the peace of this ship by telling the people you have come. Nor am I willing to terrorize my family by letting them see you."

For a long while I stared silently into space.

The captain dismissed a pilot from the control room and had me come in.

"You can see for yourself that we are straight on our course. You have already seen that all the supplies are holding up. You have seen that the population problem is well cared for. What more do you want?"

What more did I want! With the whole population of the *Flashaway* steeped in ignorance—immorality—superstition—savagery! *

Again the captain shook his head. "You want us to be like your friends of the twenty-first century. *We can't be.*"

He reached in his pocket and pulled out some bits of crumpled papers.

"Look. I save every scrap of reading matter. I learned to read from the primers and charts that your son's grandparents made. Before the destruction, I tried to read about the Earth-life. I still piece together these torn bits and study them. But I can't piece together the Earth-life that they tell about. All I really know is what I've seen and felt and breathed right here in my native *Flashaway* world.

"That's how it's bound to be with all of us. We can't get back to your notions about things. Your notions haven't any real truth for us. You don't belong to our world," the captain said with honest frankness.

"So I'm an outcast on my own ship!"

"That's putting it mildly. You're a menace and a troublemaker—*an ogre!* It's in their minds as tight as the bones in their skulls."

The most I could do was secure some promises from him before I went back to the ice. He promised to keep the ship on its course. He promised to do his utmost to fasten the necessary obligations upon those who would take over the helm.

"Straight relentless navigation!" We drank a toast to it. He didn't pretend to appreciate the purpose or the mission of the *Flashaway,* but he took my word for it that it would come to some good.

"To Robinello in 2666!" Another toast. Then he conducted me back, in utmost secrecy, to my refrigerator room.

I AWOKE to the year of 2566, keenly aware that I was not Gregory Grimstone, the respected Keeper of the Traditions. If I was anyone at all, I was the Traddy Man—the ogre.

But perhaps by this time—and I took hope with the thought—I had been completely forgotten.

I tried to get through the length of the ship without being seen. I had watched through the one-way glass for several hours for a favorable opportunity, but the ship seemed to be in a

* Professor Grimstone is obviously astounded that his charges, with all the necessities of life on board their space ship, should have degenerated so completely. It must be remembered, however, that no other outside influence ever entered the *Flashaway* in all its long voyage through space. In the space of centuries, the colonists progressed not one whit.

On a very much reduced scale, the *Flashaway* colonists are a more or less accurate mirror of a nation in transition. Sad but true it is that nations, like human beings, are born, wax into bright maturity, grow into comfortable middle age and ofttimes linger on until old age has impaired their usefulness.

In the relatively short time that man has been a thinking, building animal, many great empires—many great nations—have sprung from humble beginnings to grow powerful and then wane into oblivion, sometimes slowly, sometimes with tragic suddenness

Grimstone, however, has failed to take the lessons of history into account through the mistaken conception that because the colonists' physical wants were taken care of, that was all they required to keep them healthy and contented.—Ed.

continual state of daylight, and shabby-looking people roamed about as aimlessly as sheep in a meadow.

The few persons who saw me as I darted toward the captain's quarters shrieked as if they had been knifed. In their world there was no such thing as a strange person. I was the impossible, the unbelievable. My name, obviously, had been forgotten.

I found three men in the control room. After minutes of tension, during which they adjusted themselves to the shock of my coming, I succeeded in establishing speaking terms. Two of the men were Sperrys.

But at the very moment I should have been concerned with solidifying my friendship, I broke the calm with an excited outburst. My eye caught the position of the instruments and I leaped from my seat.

"How long have you been going *that way?*"

"Eight years!"

"Eight—" I glanced at the huge automatic chart overhead. It showed the long straight line of our centuries of flight with a tiny shepherd's crook at the end. Eight years ago we had turned back sharply.

"That's sixteen years lost, gentlemen!"

I tried to regain my poise. The three men before me were perfectly calm, to my astonishment. The two Sperry brothers glanced at each other. The third man, who had introduced himself as Smith, glared at me darkly.

"It's all right," I said. "We won't lose another minute. I know how to operate—"

"No, you don't!" Smith's voice was harsh and cold. I had started to reach for the controls. I hesitated. Three pairs of eyes were fixed on me.

"We know where we're going," one of the Sperrys said stubbornly. "We've got our own destination."

"This ship is bound for Robinello!" I snapped. "We've got to colonize. The Robinello planets are ours—America's. It's our job to clinch the claim and establish the initial settlement—"

"Who said so?"

"America!"

"When?" Smith's cold eyes tightened.

"Five hundred years ago."

"That doesn't mean a thing. Those people are all dead."

"I'm one of those people!" I growled. "And I'm not dead by a damned sight!"

"Then you're out on a limb."

"Limb or no limb, the plan goes through!" I clutched my gun. "We haven't come five hundred years in a straight line for nothing!"

"The plan is dead," one of the Sperrys snarled. "We've killed it."

HIS brother chimed in, "This is our ship and we're running it. We've studied the heavens and we're out on our own. We're through with this straight-line stuff. We're going to see the universe."

"You can't! You're bound for Robinello!"

Smith stepped toward me, and his big teeth showed savagely.

"We had no part in that agreement. We're taking orders from no one. I've heard about you. You're the Traddy Man. Go back in your hole—and stay there!"

I brought my gun up slowly. "You've heard of me? Have you heard of my gun? Do you know that this weapon shoots men dead?"

Three pairs of eyes caught on the gleaming weapon. But three men stood their ground staunchly.

"I've heard about guns," Smith hissed. "Enough to know that you don't dare shoot in the control room—"

"I don't dare *miss!*"

I didn't want to kill the men. But I saw no other way out. Was there any other way? Three lives weren't going to stand between the *Flashaway* and her destination.

Seconds passed, with the four of us breathing hard. Eternity was about to descend on someone. Any of the three might have been splendid pioneers if they had been confronted with the job of building a colony. But in this moment, their lack of vision was as deadly as any deliberate sabotage. I focused my attack on the most troublesome man of the three.

"Smith, I'm giving you an order. Turn back before I count to ten or I'll kill you. One . . . two . . . three . . ."

Not the slightest move from anyone.

"Seven . . . eight . . . nine . . ."

Smith leaped at me—and fell dead at my feet.

The two Sperrys looked at the faint wisp of smoke from the weapon. I barked another sharp command, and one of the Sperrys marched to the controls and turned the ship back toward Robinello.

CHAPTER VII

Time Marches On

FOR a year I was with the Sperry brothers constantly, doing my utmost to bring them around to my way of thinking. At first I watched them like hawks. But they were not treacherous. Neither did they show any inclination to avenge Smith's death. Probably this was due to a suppressed hatred they had held toward him.

The Sperrys were the sort of men, being true children of space, who bided their time. That's what they were doing now. That was why I couldn't leave them and go back to my ice.

As sure as the *Flashaway* could cut through the heavens, those two men were counting the hours until I returned to my nest. The minute I was gone, they would turn back toward their own goal.

And so I continued to stay with them for a full year. If they contemplated killing me, they gave no indication. I presume I would have killed them with little hesitation, had I had no pilots whatsoever that I could entrust with the job of carrying on.

There were no other pilots, nor were there any youngsters old enough to break into service.

Night after night I fought the matter over in my mind. There was a full century to go. Perhaps one hundred and fifteen or twenty years. And no one except the two Sperrys and I had any serious conception of a destination!

These two pilots and I—*and one other,* whom I had never for a minute forgotten. If the *Flashaway* was to go through, it was up to me and *that one other*—

I marched back to the refrigerator room, people fleeing my path in terror. Inside the retreat I touched the switches that operated the auxiliary merry-go-round freezer. After a space of time the operation was complete.

Someone very beautiful stood smiling before me, looking not a minute older than when I had packed her away for safe-keeping two centuries before.

"Gregory," she breathed ecstatically. "Are my three centuries up already?"

"Only two of them, Lora-Louise." I took her in my arms. She looked up at me sharply and must have read the trouble in my eyes.

"They've all played out on us," I said quietly. "It's up to us now."

I discussed my plan with her and she approved.

One at a time we forced the Sperry

brothers into the icy retreat, with repeated promises that they would emerge within a century. By that time Lora-Louise and I would be gone—but it was our expectation that our children and grandchildren would carry on.

And so the two of us, plus firearms, plus Lora-Louise's sense of humor, took over the running of the *Flashaway* for its final century.

As the years passed the native population grew to be less afraid of us. Little by little a foggy glimmer of our vision filtered into their numbed minds.

THE year is now 2600. Thirty-three years have passed since Lora-Louise and I took over. I am now sixty-two, she is fifty-six. Or if you prefer, I am 562, she is 256. Our four children have grown up and married.

We have realized down through these long years that we would not live to see the journey completed. The Robinello planets have been visible for some time; but at our speed they are still sixty or eighty years away.

But something strange happened nine or ten months ago. It has changed the outlook for all of us—even me, the crusty old Keeper of the Traditions.

A message reached us through our radio receiver!

IT WAS a human voice speaking in our own language. It had a fresh vibrant hum to it and a clear-cut enunciation. It shocked me to realize how sluggish our own brand of the King's English had become in the past five-and-a-half centuries.

"Calling the *S.S. Flashaway!*" it said. "Calling the *S.S. Flashaway!* We are trying to locate you, *S.S. Flashaway.* Our instruments indicate that you are approaching. If you can hear us, will you give us your exact location?"

I snapped on the transmitter. "This is the *Flashaway.* Can you hear us?"

"Dimly. Where are you?"

"On our course. Who's calling?"

"This is the American colony on Robinello," came the answer. "American colony, Robinello, established in 2550—fifty years ago. We're waiting for you, *Flashaway.*"

"How the devil did you get there?" I may have sounded a bit crusty but I was too excited to know what I was saying.

"Modern space ships," came the answer. "We've cut the time from the earth to Robinello down to six years. Give us your location. We'll send a fast ship out to pick you up."

I gave them our location. That, as I said, was several months ago. Today we are receiving a radio call every five minutes as their ship approaches.

One of my sons, supervising the preparations, has just reported that all persons aboard are ready to transfer—including the Sperry brothers, who have emerged successfully from the ice. The eighty-five *Flashaway* natives are scared half to death and at the same time as eager as children going to a circus.

Lora-Louise has finished packing our boxes, bless her heart. That teasing smile she just gave me was because she noticed the "Who's Who Aboard the *Flashaway*" tucked snugly under my arm.

1940

World Science Fiction CONVENTION

BOB TUCKER
Director, Illini
Fantasy Fictioneers

MARK REINSBERG
Chairman, Convention Committee

ERLE KORSHAK
Corresponding Secretary-Treasurer

☆

THE news story of the year in the science fiction world is the coming Science Fiction Convention to be held in Chicago. Sponsored by the Illini Fantasy Fictioneers, under the direction of prominent fan Bob Tucker, Mark Reinsberg, Chicago amateur publisher, who is also a fan, and Erle Korshak, science fiction's Beau Brummell, indications are that it will be even more successful than last year's New York session, which gained nation-wide attention in *Time* Magazine.

Our readers will remember the write-up of that convention which appeared in AMAZING STORIES, and will recall that it was held in honor of Frank R. Paul, the grand old artist of science fiction. This year, Edward E. Smith, Ph.D., will be honored for his classic novels of the past ten years, especially the famous "Skylark" novels.

Fans from all over the country are expected to attend, to meet famous authors and editors, and to further the advancement of their favorite literature—science fiction.

THE TIME
September 1st—2nd
First Session, 10:00 A.M.

THE PLACE
Hotel Chicagoan
Madison Street
near Dearborn

THE PEOPLE
Fans, Authors, Editors
The Man from Mars

THE WATCHWORD
Come and Enjoy Yourself—Everything Is Free

Free

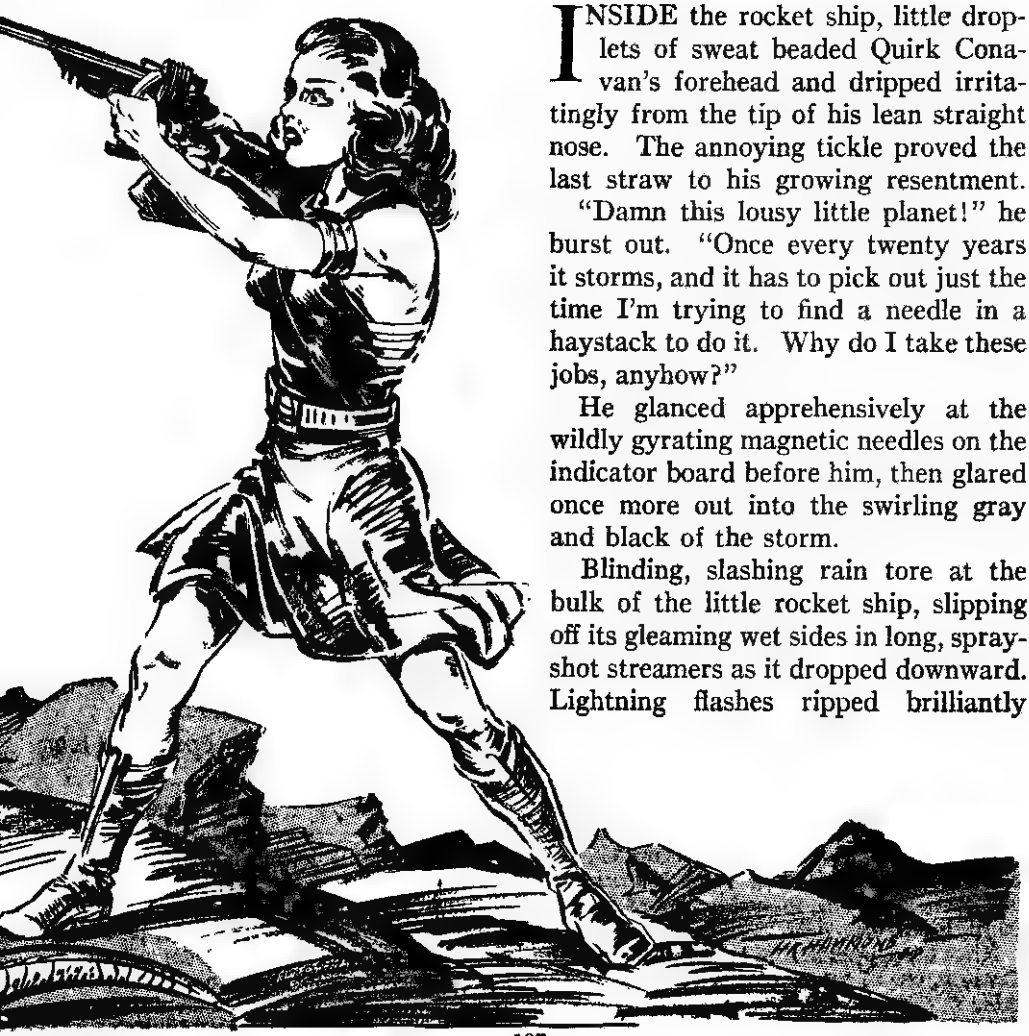
Original Illustrations from AMAZING STORIES and FANTASTIC ADVENTURES Will Be Given Away Free to All Fans Who Sign the Convention Register

Conavan backed against the thick bole, trapped before the monster. Then a single rifle shot rang out

Revolt on Io

by Jack West

Quirk Conavan faced the toughest assignment of his career when he landed on Io and undertook to establish law and order



INSIDE the rocket ship, little droplets of sweat beaded Quirk Conavan's forehead and dripped irritatingly from the tip of his lean straight nose. The annoying tickle proved the last straw to his growing resentment.

"Damn this lousy little planet!" he burst out. "Once every twenty years it storms, and it has to pick out just the time I'm trying to find a needle in a haystack to do it. Why do I take these jobs, anyhow?"

He glanced apprehensively at the wildly gyrating magnetic needles on the indicator board before him, then glared once more out into the swirling gray and black of the storm.

Blinding, slashing rain tore at the bulk of the little rocket ship, slipping off its gleaming wet sides in long, spray-shot streamers as it dropped downward. Lightning flashes ripped brilliantly

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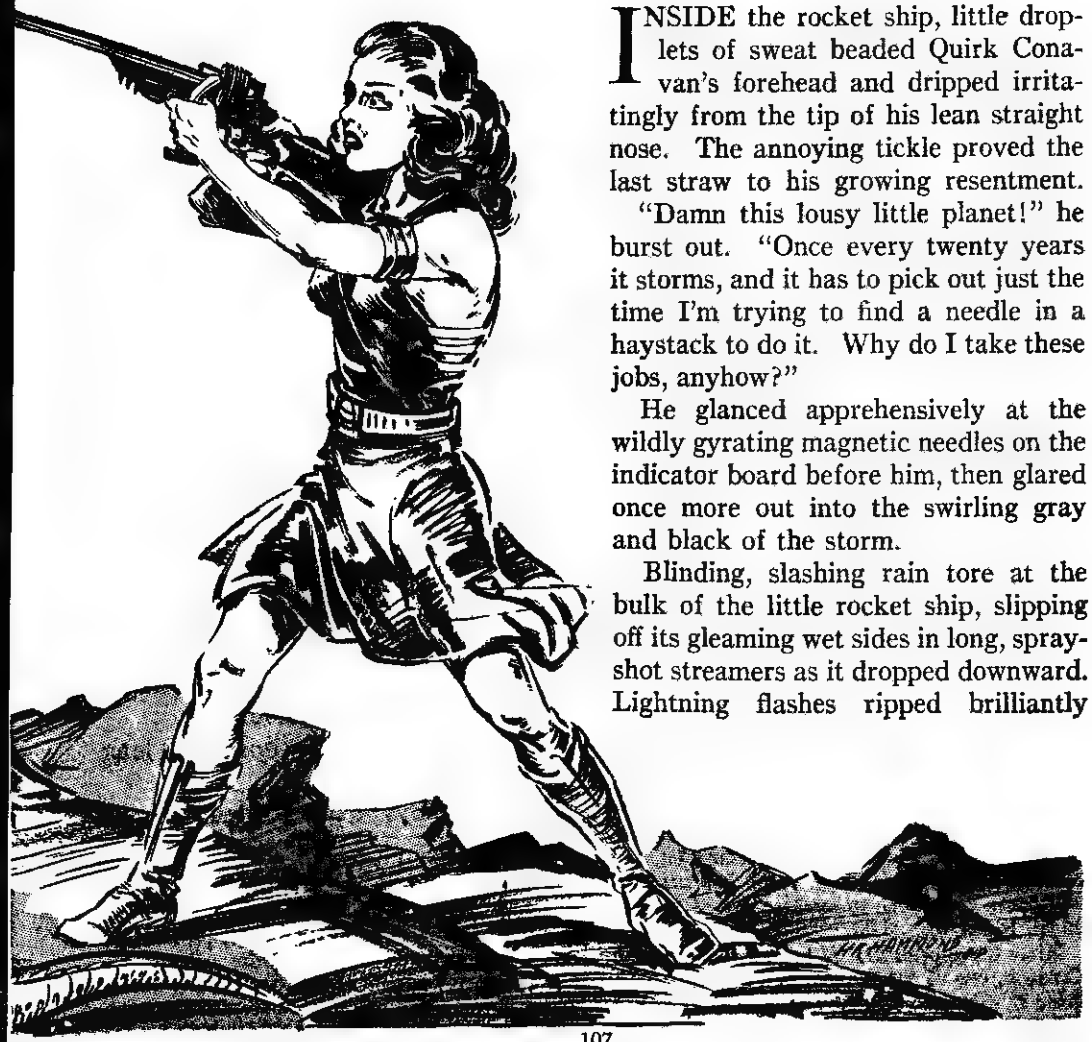

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through the darkness.

Down below, somewhere, was the little town of Red Moss, Conavan's destination. But somewhere meant almost anywhere within a hundred miles, as far as his instruments could tell him.*

His lips tightened. "I'll be lucky if I can even land this crate without crashing!"

Conavan's fingers gripped the wheel of the tiny space rocket so hard that they ached. His eyes sought once more the spinning, magnetized instruments, and he swore silently. Useless! Every one of them. He couldn't even tell his elevation!

Suddenly out of the murk loomed the towering mass of a precipitous cliffside. Madly he spun the wheel. The rockets roared, but too late. The keel struck with an ominous crash. The rockets on one side ceased firing. Like a wounded bird the ship veered away, dropping nose downward.

Conavan brace himself and clung to the wheel. With a terrific jolt the ship struck, sliding along in a soft, yielding substance. It rolled over completely, then came to a rocking halt, surging and bouncing to free itself, rockets still firing. A bit dazed, Conavan shut them off and the ship became motionless.

Outside, the storm raged, the ship shuddering with the reverberations of the thunder, deafeningly audible to Quirk Conavan now with the destruction of the vacuum in the hull.

Slowly his muscles relaxed and he leaned back in his seat, mopping his brow and grinning wryly.

"Rage on, storm, and wear yourself out for another twenty years," he mocked in lessened irritation. "Now that I'm on the ground, I can wait!"

AFTER what seemed interminable hours, abatement of the storm brought a dull red daylight, growing slowly as the clouds disappeared. Conavan watched interestedly for his first glimpse of the planet that had welcomed him so rudely.

Lifting mists dissolved with startling rapidity from Io's usually clear, tranquil atmosphere, beginning to reveal towering black cliffs in the distance.

To the right, the forbidding barrier stretched into the distance in one direction; to the left it veered behind the ship in a sharp curve. Conavan followed the curve with roving eyes until he made a complete about-face. The cliff eventually paralleled itself, forming an enclosed valley perhaps ten miles wide. To the north the cliff-bound valley stretched into distance, its further end lost in Io's curving domain.

Conavan pursed his lips in a long whistle of concern.

"Lost Valley!"* he exclaimed.

* Io was a Martian possession until late in the twenty-second century, when it became "neutral" territory, open to individual initiative, by special decree of the Martian Federation. Mars had no desire for far-flung territorial holdings, nor did she wish to risk the growing possibility of waging war to retain such territories.

At the dawn of the twenty-third century, however, Ionian independence was rapidly being threatened by unscrupulous mossland owners and big brigands, who were gradually assuming power and obtaining territory through high-handed methods.

Interplanetary complications were threatening, and far-seeing individuals in Earth-Mars politics, members of the Secret Council, foresaw the necessity of setting up a form of self-government, and bringing law and order to a world that was rapidly being given over to lawlessness and rule by might, rather than right.

Hence the appointment of Special Deputy Quirk Conavan, one of the most colorful figures of the Solar System, to establish an honest and democratic system of self-rule on Io.—Ed.

* An inaccessible depression some two hundred miles long by ten wide, surrounded by thousand-foot-high cliffs. These cliffs, through absorption of the rays from Jupiter's Red Spot, protect and foster the growth of the moss in the valley to the almost incredible depth of ten feet or more, whereas the mosslands in unprotected areas rarely reach a depth of more than two or three inches.—Ed.

"I certainly picked a fine spot to land!"

He stepped from the ship, setting foot on a soft, mossy terrain into which his feet sank to the ankles. The moss was thickly matted and spongy, a vivid yellow in color. It covered the ground, even growing over boulders and projecting crags. About ten feet thick on an average, Conavan judged.

He walked lightly forward, climbed a mossy hillock and halted at the top to survey the valley in detail.

On all sides stretched the rolling mosslands, now becoming brilliant orange with the effect of the growing light coming through the dispersing clouds overhead. Immediately below, not far from the ship, was a flaming crimson forest of gigantic, prone-sprawling vines, with leaves that sprouted from greatly swollen petioles and spread dark shadows beneath their twenty-foot breadths.

They swayed slightly in the now quiet atmosphere, gleaming wetly with beautiful color. Some distance away a giant leaf tipped suddenly, spilling a cascade of water to the ground, then shot up wildly for a moment before resuming its restless balance.

Scattered over the valley were other forests of the massive vines.

The clouds vanished completely now, to reveal the great bulk of Jupiter filling more than half the sky. Directly above was the lurid gash of the famous Red Spot. Somehow it seemed malignant and menacing, and Conavan stared at it a moment with quizzical eyes. He wondered if it always appeared so large and active.

Conavan turned to the north, where the cliffs wheeled around in a half circle. There, splitting the barrier was a gigantic seismic fracture, forming a narrow pass, fairly wide at the top, but narrowing down to nothingness.

"The only way out of this place, if I remember my map correctly," Conavan observed aloud.

Gazing reflectively at the pass, which looked to be about six miles distant, his face took on a wry expression.

"And the map also says Red Moss is forty miles from the pass!" he added. "It looks like I'm going to have to leg it!"

HE turned to descend the hillock. Suddenly without warning the soft moss sagged beneath his weight. Conavan leaped desperately to regain his balance but failed. Down the slope he plunged, sliding and rolling helplessly, unable to halt his dizzy progress.

Before he reached the bottom, he began bouncing crazily on the soft, rubbery moss, the light pull of gravity playing strange pranks with his efforts to regain his footing. An instant of ludicrous flailing of arms and legs, and then he landed soddenly, head first, in the moss at the bottom, sinking almost to his waist.

Choking, Quirk Conavan fought to release himself from the sticky clutches of the wet mass. Finally, gasping for breath, he succeeded. Awkwardly he clambered to his feet, wiping moss from his face and spitting the dank-tasting stuff from his mouth.

Wryly he surveyed his dripping clothes, then abruptly burst into humorous laughter as he mentally pictured himself plunging down the slope like a helpless baby.

"Quirk Conavan, planetary agent extraordinary, takes a nose-dive. Can't stand on his own feet." He chuckled. "The Secret Council back on Mars ought to have seen that. Maybe they'd begin to wonder if they'd picked the right man for this job!"

The splash of water behind him caught his attention and he turned, still

grinning, to see a giant leaf swaying wildly, evidently just having dumped its burden of water. Then the grin died abruptly, wiped from his face as though by a quick slap.

Emerging from beneath that giant leaf was an incredible monster, some twelve feet in length. It was six-legged and slim-waisted, but its head was massive and armed with a sharp stinger perhaps thirty inches long.

Two large lobster-like claws some three feet in length protruded from the base of that head, and from just between and below the eyes, where the nose ought to have been, were two heavy, club-like antennae. The creature was chitin-armored, and presented an indefinable air of efficiency that Conavan could not place at first.

Then, with a shock he realized the creature had no real body outside of that waspish waist, which certainly could contain no stomach sufficient to digest the food such a monster would require in order to subsist. The creature peculiarly suggested an ant, with its body amputated just behind the thorax.

The final shock came when Conavan realized the creature had no mouth! A living, natural fighting machine! It *couldn't* be alive, but nevertheless there it was.

But he had no time for further observation. He realized abruptly, as the creature charged forward, that he was in almost a hopeless position. Unarmed, and the distance between him and the safety of the ship as great as that separating him from the unnatural, machine-like monster, he bade fare to become the loser in either battle or race.

Wheeling, Quirk Conavan plunged toward the ship with all the speed at his command. He stumbled in the heavy moss, falling this way and then that, like a drunken man walking on a sea of mattresses. He lost his footing and rolled flat on his face. Getting up, he knew he would have to face the monster and fight it out.

He turned and saw that the incredible beast was following him. Its huge hairy legs walked lightly over the soft moss, its enormous oval feet giving it added traction in the same manner that a showshoe keeps a man from sinking into the drifts. The monster waved its huge crab-like claw in Conavan's direction.

Conavan dug his feet into the soft moss and clenched his fists. He knew it was a futile gesture of heroics, but at least he'd put up a fight of some kind. He lunged forward in an attempt to land a blow in the animal's many-faceted eye. His feet dug into the soft moss and—

There came the screaming hiss of a steam bullet. The charging animal crumpled crazily forward and landed in a heap on Conavan. Only the soft moss kept him from being crushed. Blinded, pinned to the ground, he kicked and squirmed in an effort to free himself; but he could hardly move the grotesque corpse.

"Don't get so excited," came the muffled sound of a feminine voice. "Just push at the count of three and help me get this carcass off you. Now, one—two—three—PUSH!"

Conavan threw his shoulders against the animal and heaved with all his strength. He saw a small opening. It became larger and he slipped through. He rose erect to see the monster fall back into its lifeless position.

He turned to face one of the most beautiful girls he had ever seen—a golden-haired bit of femininity whose shapely form was further accentuated by a range costume, consisting of a pair of tight-fitting breeches and a glistening shirt made of glass cloth. Strapped

to her feet were large discs which, Conavan judged, were to give her better support on this planet of uncertain footing and weak gravitational attraction.

In her hand she held an atomic automatic,* still smoking.

CHAPTER II

A Cold Welcome

THE girl stepped forward and was about to speak when Conavan interrupted.

"May I express my sincere appreciation for what you have done—you have saved my life," he said. "And may I also add that you are very beautiful?"

She ignored his thanks and his added observation.

"Why are you in this valley? You have no business here," she said curtly. "This is private property and we don't allow trespassing!"

"I say," he replied, a bit piqued at her sharpness, "you're a sharp-tongued little Ionian. Io is a free planet and I have just as much right here as you have."

"Maybe you have," she clipped, "and maybe you haven't; but I'm going to see that you get out of here in a hurry. Get back into your rocket ship and clear out." She waved her gun in the direction of Conavan's ship.

"You are very determined, Miss—ah—er—"

"Orm," she spoke sharply. "Alice Orm."

"Mine's Quirk Conavan," he informed her. "I'd just as soon leave—now that I know I'm not welcome; but my ship is damaged and it will need repairs before I can get out of here."

Conavan pretended ignorance of the fact that he knew he was in Lost Valley.

"Show me to the nearest town and I'll get supplies to repair my ship," he offered.

"There is only one way out of here and that is through Micro Pass, seven miles from here." She hesitated in apparent disgust. "I suppose I'll have to show you the way. Come on." She waved her hand grudgingly.

"Just a minute," said Conavan. "I've got to get some things out of my ship."

"No, you don't," she commanded. "You just get yourself ahead of me and march! That's an old stunt and I'm on to it. You won't need any guns. Get going, now!"

Quirk Conavan grimaced wryly, then stumbled obligingly ahead through the thick moss. He climbed a steep slope and finally came to a rocky plateau, where he found three Earth burros calmly waiting. They too wore large ground gravitational discs on their hoofs. One wore a saddle and the others had packs strapped to them. Conavan noted that the packs consisted of a number of strange canteens, which evidently were used to transport a liquid of some sort.

A few minutes later Conavan and Alice Orm were riding side by side.

"Do you mind if I ask you what you are doing in this valley?" asked Conavan gingerly.

Their burros were picking their way through a particularly heavy growth of moss and fern-like plants. The plants towered a full two hundred feet tall, cutting off most of the light. Only occasional beams broke through in spotty designs on the trail ahead.

She turned to Conavan, giving him an irritated glance.

* This gun is not unlike the old-time Colt automatic of the year 1940. The atomic gun, however, uses a lead bullet of tremendous range. Steam, generated inside the lead pellet and fired through the rear like a rocket-tube blast, gives this gun a range of over a mile. It is equipped with telescopic sights.—Ed.

"You," she said, "may have ruined a good batch of cowkin serum—just because you got too darn curious!"

"Me?" Conavan queried in mock indignation, pointing his forefinger at his chest with an injured gesture.

"Yes, you," she retorted. "And what's worse, you made me kill a kackin."

Conavan frowned. "This is getting too deep for me," he said. "What on Earth, or should I say Io, is a cowkin and a kackin? Sounds like something out of a nursery book to me. And what's wrong about killing a monster like that? They certainly don't make agreeable pets, and besides, I don't feel very flattered to observe that you seem to value a kackin's life over mine."

FOR answer she reined her burro to a halt and dismounted. Turning to Conavan she said:

"That is none of your business."

Then she walked off the trail toward a clump of the large fern-like plants.

Puzzled, Conavan watched. Suddenly he saw something that made his blood run cold. A huge round bulb-shaped monster lay bulkily beneath a fern plant, not ten feet from Alice. She was headed directly for the awful thing.

It had four huge octopus-like tentacles which were waving grotesquely back and forth. The gruesome beast was a pinkish color, almost the same color as the fern under which it concealed itself. At the base of the tentacles was a large mouth which drooled a green fluid.

For a moment Conavan was frozen to his saddle.

"Miss Orm!" he shouted in desperation. But he knew he was too late. Alice Orm already stood directly before the ugly beast.

Then, to Conavan's utter surprise, she looked calmly up at the awful thing and proceeded to take a small flask from her belt. She held it underneath two teats, which protruded from the huge udder of the animal. Next she fiercely beat the baggy thing with her fists.

Soon an amber-colored syrup started to flow from the teats. The terrible-looking beast calmly continued to wave its menacing tentacles, but in no way did it harm Alice Orm as she carefully collected every drop of the fluid in her canteen.

Amazed at this incredible "milking" of a monster, Quirk Conavan dismounted and stumbled through the heavy moss. He had no gravitational shoes and floated along clumsily.

He had not taken three steps when he noticed a rustling in the yellow moss to his right. He froze in his tracks. Again he saw the wispy moss move.

This time a reddish-colored head peered through the growth and took careful scrutiny of the terrain. The queer face looked straight at Conavan, then at Alice Orm. Satisfied that all was well, the odd creature stepped forward into plain view.

The thing stood six feet high and looked like an enormous frog. A pair of antennae, eight feet long, protruded from the strange creature's puffy head. At the end of these antennae were small knobs with mouth-like openings in them. Conavan was surprised at the intelligent appearance of the creature's face. Its large brown eyes were quiet and solemn. It stood on its rear legs in man-fashion with its forepaws on its hips, quietly surveying the entire scene with apparent approval.

"What the hell," said Conavan, turning cautiously to Alice Orm, his startlement abating, "is that?" He pointed in the direction of the third new creature he had seen during the last two hours.

"That," she said tersely, "is none of your business."

To Conavan's surprise, she turned to the animal and whistled softly.

"Here, Willie," she called.

The animal, like a faithful dog, came loping forward. Alice gave it an affectionate pat on one paw and then it scurried off into the deep moss, making a noise that sounded like a pleased gurgle.

"Come," said Alice Orm to the baffled Earthman. "That's all for today. We'll head for the ranch."

Conavan followed her back to the burros.

"Never," he said in disgust, assisting her to mount her own animal before he bestrode his own, "have I been treated to more magnanimous southern hospitality, nor to such enthusiastic talkativeness."

She stared at him sharply, but said nothing.

HE followed her down the trail with a puzzled frown creasing his forehead. What was the matter with this lovely girl? She almost seemed to hate him, simply because of his presence in the valley. And her determination not to give him the slightest scrap of information about the valley or its creatures or her business seemed strange indeed.

Obviously the creature she had milked was a "cowkin," and the creature she had rescued him from with her timely rifle shot was a "kackin." But what the cowkin serum was for, or why a kackin's death was regrettable was beyond him.

The sun was a small red dot in the sky by the time Quirk Conavan and Alice Orm reached Micro Pass. The pass was a narrow passage between two two-hundred-foot high masses of rock. It seemed as if some great cosmic buzzsaw had cut a slit in the gigantic bowl of rock.

Conavan automatically sensed that it was a perfect defensive position to hold in case of an attempted invasion into the valley. But on the other hand, it was a perfect place for an ambush. The pass was so narrow that any invaders would have to go through in single file. It would be simple to hide on top of the passage and snipe off anyone who entered the valley.

As Quirk Conavan and Alice Orm rode out of the pass, they came upon a rambling cabin nestled in a heavily mossed section alongside the pass entrance. It was dusk, and the yellow light from the windows cast friendly beams through the purple murk of the valley.

Conavan knew this must be Alice Orm's home. He heard the heavy door of the cabin slam, and in the dim light he saw the figure of a man coming down the trail, carrying a large calibre gun.

As the man came within sight, Conavan noticed that he was an exceptionally thin youth. His dark eyes seemed to stare weakly from deep sunken sockets, and his bony fingers seemed barely able to hold the heavy gun in them. He walked defiantly up the trail, stopped, and then stood there, his legs slightly apart, the gun held ready in both hands.

"What's this here guy doing in our valley, Alice?" His voice sounded like a steel saw cutting stone.

Alice Orm explained how she had discovered him during one of her milking tours.

"I think he's one of Shag Gorrell's gang," she said. "I think he's another dirty spy!"

"Let's shoot him," said the thin youth, pointing his gun in Conavan's direction. "What's another one of Shag Gorrell's gang? They're better dead than alive. They'd think nothing of burning a steam bullet through one of us. . . ."

Quirk Conavan twisted uneasily in his saddle. He was unarmed and if he was to be shot, there was nothing he could do about it. But the whole affair struck him as rather absurd.

He had landed in a valley full of mysterious creatures, only to be accused of being responsible for the death of one of them. And now he was being accused of belonging to some mysterious gang headed by one Shag Gorrell. It was decidedly off-color.

He addressed the thin youth. "I don't know who you are," he said, "but I do know that both you and Miss Orm are using just a bit too much imagination. I'm to be shot simply because I accidentally landed in your valley!"

The youth's hand whitened on the trigger and he leveled the gun menacingly toward Conavan's stomach.

"I'd advise you not to shoot," continued Conavan. "You'd be no better than the rat Shag Gorrell you speak of."

"Carl, put your gun down!" Alice Orm commanded. "He's right. Let's take him in to Dad and see what he has to say."

RELUCTANTLY the younger man lowered his gun.

"All right," he growled, "but one false move and you'll be perforated."

Prodded by the muzzle of Carl's gun, Conavan was guided into the living room of the shack. He found it furnished in a neat and friendly manner. A large red rug covered the floor and a roaring fire in the fireplace kept out the night chill. Large leather chairs, evidently imported from Earth, were conveniently placed around the fireplace. Above the hearth was a rack holding a dozen different model rifles and automatics, weapons enough to hold off an army.

As they entered, a gray-haired man got up from one of the easy chairs. He knocked the ashes nervously from his pipe.

"What delayed you, daughter?" he asked, taking the girl in his arms and kissing her. "I was beginning to consider coming after you. That storm had me worried."

"Oh, Daddy," she replied, "you're just a silly old worrier."

"And who is this gentleman?" Orm released his daughter and gave Quirk Conavan a cold appraisal with eyes that gave the impression that they were normally kindly.

"He's a dirty spy," said Carl, giving Conavan a sharp poke with the muzzle of his gun.

"I'm not a spy," protested Conavan quietly. "I just got lost and landed in your valley." Conavan felt somehow that in the elder Orm he had found someone who would listen to reason.

"You may not be a spy," put in Alice Orm, "but you ask an awful lot of questions for an innocent person who is just lost."

"Just a minute now, daughter," said the gray-haired man. "We must give this gentleman a chance to explain." He turned to Conavan and continued, "Have a chair Mr.—ah—"

"Conavan is my name, sir—Quirk Conavan."

Orm introduced himself as Val Orm and then formally introduced his daughter, Alice, and son, Carl. They both stood staring at Conavan from behind their father's chair.

"Perhaps," said Val Orm, "my daughter and my son have treated you rudely. Please forgive them. We have been having a bit of trouble and they are only looking out for my safety." He spoke in a friendly tone.

Conavan smiled. "I wasn't very enthusiastically welcomed," he admitted, before the older man went on.

"I dislike immensely the task of keeping people away from my valley, but it is essential that our animals be not disturbed."

Val Orm gave Conavan the impression of a man who is both deeply sincere and honest. His words fell softly and his deep brown eyes seemed sad and weary from many years of struggle.

"Tell me how you happened to land in our valley and where you wish to go, and I will do what I can," he said.

"I wanted to land at Red Moss," Conavan explained, "but I became lost in the storm and hit your valley instead. I've traveled some 260,000 miles, and I don't think missing my destination by a mere 40 or 50 miles because of a storm is a serious offense. There's a man I want to see in Red Moss named Pogo Joe."

"Pogo Joe!" Alice and Carl Orm exclaimed in unison.

Their faces suddenly lost their cold antagonism. Carl lowered his gun, the heavy butt making a friendly "thump" on the board floor. Alice walked over and settled herself interestedly into a chair alongside her father.

"What do you know of Pogo Joe?" she shot at him.

Conavan shrugged. "I'm afraid you'll have to do without the answer to that question," he said. "After all, you haven't given *me* any information."

SHE frowned. "If I thought you meant Pogo Joe any harm . . ."

"Pogo Joe is a friend of ours," interposed Val Orm hastily, "and a friend of his is a friend of ours, but we still don't know you well enough to trust you very far. I am sorry that we must act so unfriendly, but Shag Gorrell has found no treachery too low, and we must be everlastingly cautious as long as he continues to be a power."

The gray-haired man shook his head sadly and gazed into the fire.

"We will give you a burro and see you on your way to Red Moss," he finished. "You can sleep here tonight, but no moving around and don't ask questions. . . ."

THE moss was still damp from the early morning dew when Quirk Conavan climbed into the saddle of his mount. Carl Orm stood watching him like a pouting panther, but said nothing. The very courteous Val Orm cautiously wished him a good trip. Obviously their feelings were masked.

But Alice Orm stepped forward and there was nothing uncertain about her feelings as she said:

"Don't let me catch you snooping around our valley again. I don't know what your business is, but keep clear and we'll both be happier!"

With these words ringing in his ears, Conavan gave the burro a slap with his hand and headed for Red Moss.

He had not traveled two miles when he began to notice a distinct change in the vegetation and the climate. The land inside the valley was hilly and covered with moss and plants which grew ten and fifteen feet high. But now he was traveling over a flat plain covered with moss that seldom was over six inches high. In the valley it was cool and damp; here it was hot and dry.

Off in the far distance, Conavan could see herds of small animals foraging for food. Unlike his previous experiences with Ionian animals, Conavan knew what these were. They were *netlers*,* the "cattle" of Io.

* These animals are raised on Io and exported to Earth, where they are eaten as a table delicacy. Since Earth wars have killed off many steers and sheep, this animal has become a regular part of the Earth diet and many Ionian ranchers are becoming wealthy as netler raisers. The beast is like the Earth steer, but is smaller boned and meatier, with huge legs for better traction on the low gravity terrain of Io.—Ed.

As Conavan rode closer, he caught the sound of hoofs in the moss behind him. He whirled—and found himself looking down the barrel of an automatic.

The man who held the gun was a Venusian. Like all Venusians he had long metallic green hair and dull gray skin. His face was covered with dirty yellow dust and his fierce green eyes had the cold sheen of a guillotine blade. His drooping mustache made him look like a lynx.

He waved his gun ominously toward the trail.

"Shag Gorrell don't like none to have snoopers around his netlers. Now git, before I decides to feed you to the buzzards."

Without a word, Conavan guided his burro back to the trail and back toward Red Moss.

"So that's one of Shag's stooges," he said half aloud to himself. "I'll bet he gives himself nightmares."

A thousand questions went through Conavan's mind as he rode on. Why were the kackins so valuable? What was the mysterious cowkin milk used for? Who was Shag Gorrell and why did the Orms hate him so? Why did the name Pogo Joe seem to sooth the belligerent Orms? Obviously they were friendly to him. And who was the Venusian who had just told him to "git"? All these were questions he'd have to answer before he began the job of bringing law and order to Io.

CHAPTER III

Pogo Joe

PURPLE streaks of dusk were flooding the sky when Quirk Conavan stopped his burro on the edge of a steep descent. Deep below him in a wide, flat valley was the sprawling, ramshackle town of Red Moss. It bordered a rock-strewn river, and occasional green blotches indicated trees which some Earth-loving settler had transplanted.

A wisp of cotton-like smoke drifted aimlessly from a mud chimney and the sound of a dog's bark echoed across the valley. The scene was so unusually peaceful that it was dangerous—like a bottle of nitroglycerin. As long as the stuff is kept quiet and undisturbed, it will not go off. But just let someone disturb the bottle . . . Conavan wondered if he was about to shake that bottle.

He urged his burro down the rocky trail and headed for the main street. As he rode down the main thoroughfare, he noticed that the town's population was giving him the benefit of their frigid inspection. A Venusian barber stood in the door of his shack, his shears clicking nervously as he gave the newcomer a cold glance.

A Martian herdsman spat disdainfully into the dust as Conavan rode by. And an Earth youngster peered anxiously from behind his mother's skirts. The street seemed divided: the Venusians, dirty and unkempt, on one side, and the Martians and Earthmen on the other.

Looking first to the right and then to the left, Conavan anxiously searched for Pogo Joe's store. His secret instructions from the Martian Federation had indicated that Pogo Joe would be found running a general store and transportation business.

Pogo Joe was an Earthman and could be trusted. Conavan was to contact Pogo Joe, and from then on he would be on his own. Not even Pogo Joe was to know his mission. Secrecy was so urgent that Conavan had burned his instructions after memorizing them.

After what seemed an eternity of rid-

ing past pair after pair of staring eyes, Conavan came to the other side of town and saw a large frame store, made from Earth lumber and covered with Earth tarpaper. A sign across the two-story front of the building read:

POGO JOE'S TRADING POST

Conavan climbed the dirty board steps and swung open the heavy tarpaper-covered door to Pogo Joe's general store. Inside, the bright blue mercury-vapor light illuminated many bales of rope, barrels of powder, cans of food, and other supplies so necessary to a struggling pioneer community. At the far end of the store, three Earthmen sat around an electric heater talking furtively. The sound of the banging door made them snap to attention.

One of the men got up and hobbled forward with a peculiar up-and-down gait, as though he hopped rather than stepped. The other two sat eying Quirk Conavan suspiciously, cautiously. Conavan noticed that they were both men of neatness and bearing. One was square-jawed and heavy set, with bushy eyebrows and thick pitch-black hair. His deep black eyes were steady and frank. The other man was blond, with light blue eyes. He seemed mild mannered but tremendously powerful in build.

The man who came forward with the peculiar gait was short and stocky and determined. He wore a walrus mustache that fluttered lightly when he opened his mouth to speak.

"What'll you be having, stranger?" he asked.

"I'm looking for a man named Pogo Joe," replied Conavan.

"Well," drawled the little man, "you're looking right at him. What kin I do for you?"

"It's like this," explained Conavan. "I was making an interplanetary trip when my rocket ship crashed in the valley over by the Orm's place."

CONAVAN hoped that the name Orm would loosen the older man's tongue and possibly make him talkative. Pogo Joe gave no sign, however, and Conavan went on.

"Val Orm loaned me a burro so I could get here and get located with some outfit. I haven't got enough money to get my ship fixed, and I'll have to throw in with some outfit until I can build up a bankroll."

"And you want me to stake you with supplies until you get some money?" queried Pogo Joe matter-of-factly. "Well, you're an Earthman and I'm an Earthman, but I'm afraid things is too uncertain on this planet to be staking anyone. Because . . ."

"Things are uncertain?" Quirk Conavan pretended he was puzzled. "I don't understand. I was told on Earth that this was one of the most promising planets under the Martian Federation. How come the reports don't check?"

"I think I can explain that."

Conavan turned to face the man with the bushy black eyebrows, who now stepped forward. The fellow continued in a light carefree tone.

"Let me introduce myself. I'm Jim Arnold and this other man here is my boss, Art Kellet. He doesn't like to speak up like me, but he's losing his shirt on account of a guy named Shag Gorrell. Gorrell's why this planet is going to the dogs!" Arnold seemed bitter and a little sad.

Conavan stepped over to the two men and shook hands, introducing himself again.

"The Orms have told me about this Gorrell fellow. What's he done? Why is he such a menace?"

"What's he done!" Pogo Joe roared with indignation. "Just take a look at this here peg leg, and you can see what

he and his kind have done!"

Pogo Joe pulled up his trouser leg and tapped his wooden peg significantly with the bowl of his pipe.

"That's what he's done, the lousy rat. It was when I had a ranch of my own and a good herd of netlers that his gang swooped down one night and drove off all of my cattle. I set out after 'em, but they had mined the trail and when I hit the mined section, the explosion tore this leg off."

Pogo Joe puffed and steamed with indignation. He banged his fist on the counter and spat into a spittoon.

"Take it easy, Joe," cautioned the blond rancher Conavan now knew as Art Kellet. "It would be bad for you if Shag Gorrell should hear you talk like that. Our time will come, but we've got to be careful."

Suddenly Kellet remembered Conavan. He eyed him warily and stopped talking, as if realizing he had already said too much.

"If I'm not mistaken," said Jim Arnold, sensing Art Kellet's sudden caution, "this is supposed to be a free planet and we are supposed to have freedom of speech. Well, I for one intend to have my say about Shag Gorrell's high-handed grab of our land, as well as his strong-arm methods to force Pogo Joe here to stop delivering supplies to the Orms."

It was quite evident that Quirk Conavan's intrusion had set off a bombshell of conversation. All spoke at once, and all the time Art Kellet kept cautioning the men to hold their tongues.

It was with difficulty that Conavan called Pogo Joe to one side and asked him to sell him some goods. He revealed that he had enough cash for a few necessities. These additions were gravitational pads, cooking utensils, a pack, a rifle and an automatic.

Conavan strapped the newly bought holster to his side and affectionately fingered the walnut and steel butt of his cold blue automatic. At least now he was armed and he felt much better. Whatever happened now, he had a fighting chance.

FURTHER conversation revealed that Shag Gorrell had virtual control of almost all of the available grazing lands on Io. Slowly but surely the man was choking independent ranchers into submission. If they resisted, he raided their land and their cattle mysteriously disappeared. Often cattlemen had been found shot or horribly tortured after one of Gorrell's raids. A few strong ranchers remained. One of them was Art Kellet and the other was Val Orm.

Nobody seemed to know why the Orms guarded their *kin* monsters so carefully.

"It's none of my business what Val Orm does with his valley," said Jim Arnold. "He settled Lost Valley and it's rightfully his, and I'll help a man defend his development and settlement rights. You'll do the same, won't you, Art? Come on now, you know you're kinda sweet on Alice Orm."

The blond Art Kellet squirmed guiltily in his chair and quietly replied.

"Jim, you never will keep your mouth shut, and if Gorrell attacks the Orms, that'll be one time me and my men will fight to the finish. It will be either Shag Gorrell or me then!"

The mild-mannered Art Kellet himself seemed surprised that these were his words. He flushed a little.

"Okay, I love her," he muttered. "Just let Gorrell harm her . . ."

"He will!" Jim Arnold spoke quietly. "Everyone knows Shag Gorrell wants Lost Valley, and why he wants it; moss ten feet thick! He plans to kill the *kin* animals and take over the valley for

himself and his cattle. He's got to kill the animals or the animals will kill his cattle.

"If he kills the animals, Val Orm's milk business, whatever it is, will be ruined. If that louse Gorrell gets the valley, it will be the end of Ionian open range and the beginning of boss rule. That guy should be boiled in—"

"Shut up, you babbling little cur!"

The four men had been so engrossed in their conversation that they had failed to hear the approach of three men, who now entered and took places near the front door. Now they whirled and stood facing their antagonists.

Conavan immediately recognized one of them as the Venusian who had threatened him earlier in the day. The fellow looked like a pasty mass of gray skin and green hair in the mercury vapor light, and he stood there scornfully, taking in the situation.

The one who had spoken, also a Venusian, was an enormous fat man whose large belly shimmied like gelatin when he shifted his footing. He wore a silver coin-studded black leather belt almost a foot wide. Two ivory handled atomic automatics snuggled in holsters attached to the belt.

Most unusual, however, was the man's face. His cheeks and forehead were so fat that his eyes were little green lights sunk deep between layers of flesh. Had the man been fatter, it is probable the excess skin would have closed his eyes.

"So I should be boiled, eh? In oil, I presume is what you were going to say!" The fat man's voice sounded like sandpaper rubbed on rough metal.

"Jim Arnold," he hissed, "you talk too much to suit me. Supposin' I do want Val Orm's valley—it's none of your damn business! Supposin' I do kill his *kin* animals—they're no good to anyone that I can see. That too is none of your damn business.

"And supposin' I take over Lost Valley—I need it, don't I? My cattle are starving because the Red Spot burns everything but that protected valley."

Gorrell's face contorted with greed. Then it smoothed with satisfaction as he said:

"And of course, there's Alice Orm. She'd be a nifty bit of adornment for any man's ranch."

Quirk Conavan edged over behind a large box and got in position, just in case somebody should start shooting. He believed in precautions, and this was one time when he wanted to be ready for anything. Talk like this meant trouble was asking for an excuse to happen.

CONAVAN saw Art Kellet clenching and unclenching his fists, and he held his temper in check. But Jim Arnold, throwing discretion to the winds, stepped forward.

"Damn you, Shag Gorrell, you know right well your cattle are well fed! You just want that valley so you can control the entire satellite and have the best grazing land under your thumb! And any man who thinks he can take a woman in your manner is *—a low-down skunk!*"

Those last four deliberate words sizzled like water on a red hot iron. The man at Shag Gorrell's side moved his hand slightly closer to the butt of his gun. Art Kellet grabbed Jim Arnold by the sleeve and told him to watch his talk. And Pogo Joe cautiously edged behind the counter.

For a moment a heavy silence dropped over the room. Everyone stood still and quiet, as actors in a movie being photographed for a tense scene.

"Watch out for Jori Mutusi!" shouted Art Kellet in sudden alarm.

The man at Shag Gorrell's side took a step toward Jim Arnold. Swiftly and

cat-like his sinewy hand darted to his holster, to the butt of his gun. The gnarled hand closed on the firm grip—all in a flash.

The gun leaped from the holster and whirled into position. A shot crackled through the building—but the shot didn't come from Jori Mutusi's gun! Instead the killer's gun clanked to the board floor and lay there, a shattered bit of metal and wood, smashed by a skillfully placed bullet.

Quirk Conavan stood casually leaning against the side of a large packing box, his head in the palm of his left hand and his elbow resting nonchalantly against the side of the crate. He acted as if he was almost bored; but in his right hand was his new atomic automatic, a significant thread of blue smoke wisping from the gun's muzzle.

"Boys," he mocked, "I hate to do this, but I do so hate to see bloodshed. And, Mr. Mutusi, I'm sorry I had to bust up your little gun, but you should be more careful—those things are dangerous."

He carelessly dropped his automatic back into his fresh holster and dug his hands into his pockets, leaning his broad back against the packing box.

Jori Mutusi glowered at him a long instant, then whirled and stomped out of the shack.

Shag Gorrell stood there, mouth agape, staring at Conavan in wonderment. Quirk Conavan had just bested his Number One gunman to the draw. But that wasn't all; he had shot the gun out of Mutusi's hand with amazing accuracy and skill.

Gorrell stepped toward Conavan and forced a pleasant smile to his face.

"Not a bad shot. I could use a man like you, if you have a mind to hook up with an outfit that's riding on top. Jori got a little careless with his temper, but he's a bit impulsive. He don't mean nothing. Any time you want a job, drop in over at the Red Moss Inn and ask for me. I own the joint."

He bowed unctuously, ponderously; turned on his heel, and wobbled out through the door. One of his men closed the door with a firm bang.

"Yeah, Jori Mutusi is 'impulsive'," muttered Jim Arnold. "He was 'impulsive' when he left Rod Slatter tied to a post in the Dev Desert until he died of thirst and shock. I'll never forget finding his body with his hands nailed to the post and dried blood, rusty and black, staining the ground. Yeah, he's impulsive all right, the sadistic skunk!"

Exactly one hour later Quirk Conavan knocked on the door of 24, Shag Gorrell's room at the tumbledown Red Moss Inn. He heard the *thump-thump* of heavy feet on a carpeted floor. The doorknob turned and the door swung open, revealing the huge figure of Shag Gorrell.

"I thought you'd come, Mister," he greeted suavely. "You're a man who knows a good thing when he sees it. Come in and have a drink."

QUIRK CONAVAN introduced himself and took a small glass of Venusian uxer, a strong alcoholic drink similar to Earth cognac. Conavan raised the glass to his lips. He was about to pour the blue fluid down his throat when he heard a sharp knock at the door.

Gorrell swung open the portal to admit the gunman, Jori Mutusi. Mutusi halted, stood riveted to the floor for a moment staring at Conavan. He opened his mouth as if he was about to utter a curse. Then he suddenly stopped and checked himself. His lips drew tight and his fingers twitched.

"Come in, Jori," said Gorrell jovially. "I want you to meet Quirk Conavan. He's hooking up with us. He's a good

shot—eh, Jori? You should know!" The man laughed a hard brittle laugh and stepped forward, giving Mutusi a mock pat of approval on the back.

"Yeah," answered Mutusi sleekly. "I'm very pleased that Conavan will be with us. It will make things much easier for me"—he paused—"*much* easier for me."

Conavan thought Mutusi seemed too pleased with the arrangement, but he shrugged the matter off and thought no more of it.

"Listen, Shag," said Mutusi, turning to Gorrell. "Pogo Joe, Jim Arnold, and Art Kellet are going to try to run a shipment of supplies to the Orms. One of my men saw 'em getting ready. They're leaving tonight. Shall I set out with some of the boys and—"

He stopped speaking and waved his thumb significantly over his shoulder and leered with delight.

"Mutusi, you are a very good man," said Gorrell sarcastically, "but you just don't understand strategy. Here we have a chance to clean out the Orms and Art Kellet and his gang all at once, and all you want to do is wipe the slate partly clean. Stick to what I tell you, Mutusi, and maybe you'll get somewhere."

Jori Mutusi sulked like a scolded child as Shag Gorrell continued,

"Now, here's what we'll do: Tomorrow, early, we'll leave for Orm's ranch. Traveling light, we'll get there not long after Pogo Joe and Kellet arrive. They will be busy unloading Orm's supplies and not expecting us.

"When we get there, this guy," Shag pointed to Conavan, "will climb the cliff behind Orm's place and hide himself. We'll walk up and naturally they will be suspicious. We'll tell old man Orm we're just looking around—no harm in that.

"Then Conavan will let loose a shot from his hiding place. He's a good shot and the slug will just miss me. I'll accuse the Orms and Kellets of shooting at me. Our men will ride up and take over—we've got to maintain law and order, you know."

The huge man laughed again and slapped Conavan on the back good-naturedly.

CHAPTER V

"Willie" to the Rescue

QUIRK CONAVAN sat behind a heavy growth of moss high above the Orm ranchhouse. He had a perfect position. He could cover both the pass and the ranchhouse from here. He wondered that Shag Gorrell had trusted him so implicitly, but he knew that the smartest of racketeers were poor judges of human nature.

From his position Conavan knew he could keep an army out of Lost Valley and rout all attackers from Orm's cabin. He knew too that once Gorrell opened fire, the Orm and Kellet faction would defend themselves. It would be simple for him then to pick off Gorrell's men instead of Orm's.

Conavan leaned easily against the rocky slope, his rifle across his knees, and waited for sight of Shag Gorrell. He could see Val Orm and Alice Orm excitedly examining the supplies which Art Kellet and his men were unloading. Pogo Joe thumped about on his wooden leg, shouting orders and helping the men. One by one the men carried crates and sacks to a storage shack at the rear of the Orm cabin.

Conavan did not have to wait long. Soon he saw Shag Gorrell and several of his men emerge from a thick moss growth and ride over to where the men were busy unloading. Gorrell was a grotesque specimen of humanity as he sat on his burro, his huge belly shim-

mying with each step of the animal, his wide coin-studded belt jostling up and down. Conavan longed to send a bullet into that belly.

He couldn't hear Gorrell's conversation, but he had been instructed to open fire when Gorrell signalled him by wiping his forehead with a red handkerchief. He moved the gun from across his knees and moved forward to a prone position. Resting the front end of the stock in his left hand, he firmly clutched the pistol-like grip in his right hand. His cheek felt cool and good on the walnut stock as he looked through the telescopic sight and brought the cross-hairs into position.

Through the sight he saw Shag Gorrell's fat gray face. The cross-hairs settled on the man's helmet. It would be nice to send a screaming bullet through the helmet and into Gorrell's evil brain, but then Gorrell's men would be upon him in a minute and he would not accomplish his mission. Conavan's job was cleaning up Io and not to be a false hero or a martyr. However, after the fighting started, his bullets might conceivably hit a few of Gorrell's men. . . .

Conavan watched Gorrell through the sight of his rifle. He could see the man's lips moving in mock politeness. He saw him hunch back in his saddle and reach into his rear pocket. He saw the red handkerchief. Gorrell slowly twirled it around his finger as he continued to talk. Quickly the racketeer lifted his hand to his face and stroked his forehead with it.

Lowering his rifle so that the cross-hairs lined up with the dust beside Gorrell's mount, Quirk tensed as his finger whitened on the trigger. He felt the jar of the butt as the bullet kicked up a geyser of dust in front of the killer.

It was like dropping a match into a powder keg. Immediately one of Gorrell's men ran forward toward the white-haired Val Orm. Clutched in his hand was a bright and glistening object. He raised the object in his clenched fist and plunged at Orm. And—

Quirk Conavan squeezed the trigger of his gun again! This time he wasn't going to miss. The target was small and moving fast—so fast that only a fatal bullet could stop the man.

Conavan caught the man's finger in the sight, the outstretched arm, then the head. He felt the gun jolt backward in his hands, saw the man crumple forward in a cloud of dust. The body gave a convulsive kick and then lay flat, eyes staring foggily at the sky. One of Gorrell's killers was dead!

Conavan's hands were damp with sweat and dust as he relaxed his grip on his gun and took a deep breath of relief. He turned and was about to shift himself into a more comfortable position when he felt something hard in the small of his back.

"I expected something like this," grated a sharp voice.

Conavan wheeled and stood facing Jori Mutusi.

"So you think you can doublecross us, eh?" the Venusian spat. "Well, maybe you can fool Shag, but you can't fool me! You're after something, and I'm going to find out what it is. Now, git going!"

The gun dug into Conavan's back as he was marched down the winding trail back toward the Orm cabin. Quirk Conavan was caught red-handed and he knew it.

TEN minutes later Conavan was pushed through the cabin door by Jori Mutusi. Lying on a leather couch was Jim Arnold, droplets of blood trickling from his finger to the floor.

As the two entered, Arnold turned his head and raised himself on his good arm.

He laughed with bitter irony.

"So you've come at last, doublecrosser." He pointed weakly to Conavan. "I saw you walk out of the Red Moss Inn with Shag Gorrell and this louse. I know you're nothing but a dirty spy," he said contemptuously; and then,

"But both of you are too late to catch Art Kellet and some of the boys. They got away into the valley."

Conavan felt Mutusi's gun in his back again.

"Keep talking," the killer rasped at Arnold. "Where's Shag? Him being gone too ain't on the schedule."

"Where's Alice Orm?" asked Conavan, leaning over the wounded man and ignoring Mutusi.

Jim Arnold looked at them both sullenly. He was wounded but not hurt seriously. He tried to get up but Conavan pushed him back gently.

"You won't get any information out of me," said Arnold defiantly. "I don't get your gag, but pretending to be on our side don't go . . ."

"Stuff it," interrupted Mutusi angrily. "I'd pump a bullet in this Conavan skunk in a minute, but he's going to do some talking too, when I get him to Shag."

Arnold frowned. "Conavan, is this straight?"

Conavan shrugged. "Right now I'm not in a position to raise flags. Let's say I'm on my own side, and let it go at that. Right now, friend or enemy, I'm interested in finding Alice Orm and her father."

"And I'm interested in finding out why Shag Gorrell changed the plans so sudden," snapped Mutusi impatiently.

Conavan grinned shortly at the killer in an ironic manner.

"You didn't tell Shag you were crossing his plans on your own, sticking me in the back," he reminded the Venusian. "How do you expect him to shoot square with you? All you boys are trying to get on top."

For an instant Mutusi's eyes flamed, and he jabbed his gun into Conavan's ribs.

"For two cents I'd drill you in your tracks," he said harshly.

ARNOLD stared at them, captor and prisoner.

"If this is an act," he put in, "it's a good one. Conavan, I'm just going to take a chance that you're playing a decent game." He leaned back on the sofa and went on as Mutusi scowled.

"Shag Gorrell took Alice Orm with him as a hostage—they're both in Lost Valley. Why he went, I don't know.

"Val Orm will die unless he gets cowkin serum. That louse Gorrell destroyed all of it in this cabin. Art Kellet, Pogo Joe, Carl Orm and a handful of Kellet's boys are in Lost Valley to try to rescue Alice and get some serum for Val Orm, who is with them. If Orm doesn't get the serum within a few hours, he will have an attack of ergtern and is sure to die."

Conavan knew how terrible ergtern could be. He had seen men undergo violent nervous convulsions as a result of the disease. He knew some serum prevented attacks but he had never known where the serum came from.

Suddenly part of the puzzle of the situation in the valley fell into place. Val Orm's name flashed out of Conavan's memory and he knew he'd seen it before. The mention of ergtern brought it out.

It had been a Val Orm who had innocently brought ergtern to civilization. It was a mysterious disease that caused disruption of the cells of the nervous system and resulted in complete paralysis and eventual death. It was incurable, but its action could be halted by the mystery serum.

VAL ORM had been the innocent cause of the spread of the disease; now he was dedicating his life to the dangerous task of procuring the serum that would stop its ravages. For this Alice Orm dared the terrible kackins, worked arduously to milk the sluggish and mysterious cowkins.

No wonder she had been disturbed at the death of one of the unusual monsters. In some way, it was part and parcel of the source of the serum—just how, Conavan was baffled to know.

And now—

Conavan stiffened. "Arnold!" he barked. "Did Shag Gorrell say anything about going into the valley to kill kackins?"

Arnold stared at him.

"Yes," he admitted. "But I didn't believe that. And anyway, why worry about it? Those beasts are hell on wheels, and they ought to be wiped out . . ."

"That's what you think," Conavan clipped "Alice Orm doesn't want them killed, and there must be a good reason."

Arnold frowned. "I always thought there was something funny about those valley critters. But I guess it doesn't matter much now. Gorrell has gone to kill off all of the animal life in the valley and bring in his own cattle. The kackins would kill the cattle off.

"If Shag Gorrell had any sense, he could make a lot more money from cowkin serum than he will ever make raising cattle. So, if you're smart, both of you, you'll go after him and stop him from killing any of the animals—particularly the cowkins." Jim Arnold leaned back and closed his eyes as he stopped talking.

Reaching into his pocket, Quirk Conavan pulled out a handkerchief and started to bind the wound in Arnold's shoulder.

"I can fix him better," said Mutusi. "Git outa the way!"

Conavan backed away, bewildered as Mutusi leaned over Jim Arnold.

"I never liked you, you talk too much." He raised his gun callously and sent a bullet plowing through the defenseless man's brain.

Cold rage flamed in Conavan's brain at the brutal act. He roared aloud and leaped forward. Like a triphammer he crashed his fist into the back of the Venusian's neck. The blow landed with a crushing sound and the killer staggered, stumbled to his knees, then fell forward on his face, unconscious. Never had Quirk Conavan ever struck harder.

"You dirty murderer!" he breathed, dropping to his knees to disarm the fallen man. Amazingly, Mutusi's body jerked around, very much alert, and he faced Conavan with an automatic in his hand.

"Thought you had me with that rabbit punch, eh?" he clipped, with a savage leer. "You should remember that Venusians ain't hurt by a punch like that. You slipped that time, and just for that your death ain't gonna be pleasant."

Mutusi got up and jammed his gun in Conavan's ribs.

"Git outside!" he snarled.

MUTUSI tied Conavan's wrists to a porch post of the Orm cabin.

"You ain't gonna git off easy, Mister Doublecrosser. No nice neat killing like I just gave Arnold."

The Venusian gloated. "You will have the honor of being nailed to a post and left to yourself out in the Derv Desert!"

He gave the rope a savage tug, then spun on his heel, mounted his burro, and galloped off through the pass into Lost Valley.

For an hour Quirk Conavan tugged

and twisted at the ropes that bound him. He struggled until his arms and wrists ached and bled. Sweat rolled down his face and his chest. He paused to catch his breath for a moment, but then thoughts of thousands of Martians dying of ergtern and Shag Gorrell making Io an enslaved world made him struggle on.

In his mind's eye Conavan could see the kindly Val Orm writhing in pain, as his limbs contorted horribly with nervous convulsions in the very valley where the raw serum was available . . .

Two hours later Conavan still hung limply against the post, exhausted. It was no use. Mutusi had done too good a job with the bonds.

The odds were against Art Kellet and the Orms ever getting out of Lost Valley alive. Shag Gorrell's men hopelessly outnumbered them and only a surprise attack could possibly give them victory. This would be impossible with Shag Gorrell holding Alice Orm as a hostage.

Conavan doubted he could do anything even if he was free. Yes, he could save himself, but that wouldn't accomplish anything toward carrying out his orders. Besides, he would be branded a bungler back at Trinidal.

A rustling came from the heavy moss at his right. Looking up, Conavan saw a familiar face peering out at him. It was Willie, the intelligent-looking animal which had stood by watching Alice Orm during her milking of the cowkin in Lost Valley. Like a flash Conavan remembered Alice Orm had patted it on the head and called it "Willie" in an affectionate manner. If Willie was tame —Conavan whistled softly.

Willie pushed through the moss and trotted cautiously a few steps toward Conavan. He stopped, sniffed at the air for a moment, looked to the right and then the left, then came forward. Approaching within inches of Conavan, the creature bared its fangs and suddenly, startlingly raised murderous nailed claws to strike at the pinioned man. Conavan could feel the hot breath from the drooling mouth.

Aghast, he saw that one blow from those claws would slash his skull like so much soft clay. He had to do something and do it quick. Alice had talked to the creature and it had seemed to understand. He began to talk too.

"Look inside the house and see what Jori Mutusi did!" Conavan said as calmly as he could. "I wouldn't tie myself up, would I?"

As he said the words, they sounded silly. Would this queer thing understand? Conavan's heart crawled up into his throat. Slowly, ever so slowly, Willie lowered his paw. He seemed doubtful, puzzled. Darting to the door of the cabin, he looked in, turned and came back to Conavan.

Swiftly and savagely the animal tore at Conavan's bonds with teeth and claws, careful not to injure him. In a few seconds, the shredded rope dropped to the ground and Conavan stood thankfully rubbing his numb and aching hands.

"Willie," he breathed, "you gave me a bad moment."

BUT only for an instant did Quirk stand there. Willie's strong arms reached out and lifted him high in the air. For a fleeting second, Conavan thought he was to be smashed into the rocky ground; but gently Willie lowered him to a sitting position on his broad animal's back. Then he scampered through the pass into Lost Valley.

The firm grip held Conavan in place on the animal's broad shoulders as Willie swiftly sped through the moss jungle of Lost Valley. Occasionally he would stop to sniff the air and the trail. Then off he would bound, correcting his

course if necessary.

Suddenly they came to a well-worn trail. Turning to the left, Willie followed the trail for five minutes, then stopped short. What Conavan saw at the odd creature's feet made his blood run cold.

Val Orm lay across the trail, dead. His face was still contorted in pain, his open eyes staring glassily skyward. Val Orm had died from ergtern.

CHAPTER VI

End of the Trail

"PUT me down, Willie," said Conavan.

To his surprise the animal lowered him gently to the ground beside Val Orm's body. Hastily Conavan secured Orm's atomic gun and strapped the weapon to his own waist. For a fleeting moment he stood over the inert form, head bowed, lips grim. Then he quickly commanded Willie to lift him to his back.

"Find Alice," he urged the odd creature.

Again the fleet animal set off through the jungle. This time a strange clicking noise came from Willie's throat. The noise sounded like Morse code. It seemed to be a method of communication used to call others of his kind, because soon Conavan heard a crashing in the jungle and another of the strange beasts ran up. In about fifteen minutes there were dozens of them following Conavan.

Others crashed through the heavy moss and plunged through rivers in an effort to join the growing group.

Amazement and awe began to settle upon Conavan. These creatures had something in mind, some plan of action that was more urgent than just the rescue of Alice Orm. Conavan began to wonder if Willie really had understood his command, or whether he was simply carrying out some unknown plot of his own, bent on some unknown action of much more importance to him than one mere Earth girl.

At last Willie broke into a large bowl-shaped clearing. Plunging down the steep sides of the natural bowl, Conavan's mount stopped at its center and lowered him lightly to the ground. All this time the strangely intelligent creature was sending out a rapid staccato of clicking tones. His companions poured into the bowl, and soon Conavan and Willie stood in the center of a virtual arena, much in the manner of a speaker about to deliver an address.

Slowly the clicking speech of the many creatures faded until only Willie clicked away at his audience. This went on for ten minutes. Then suddenly the meeting broke up and the animals marched off into the jungle in groups of ten.

Willie picked his way along a particularly rocky section. Conavan followed on foot. He didn't know where the animal was leading him, but since they seemed to be scouring the valley quite effectively, they must soon discover some sign of Art Kellet and his men or Shag Gorrell's boys. Obviously Willie's people were exceptionally intelligent creatures and Conavan was beginning to have a healthy respect for them.

But a very deep concern began to fill his mind, accentuated by Willie's obviously growing activity. Something vital was brewing here in the valley. And then, there was Alice Orm—where was she, and where was Shag Gorrell?

A sharp *phizzz* sound came through the air, passed over Quirk Conavan's head. Instinctively he ducked, whipped his gun from its holster.

Before another shot could be fired, Willie dodged behind a boulder into

deep moss at the side of the trail. Peeking through the undermoss, Conavan looked into the gulch to one side of the trail. There, struggling and flaying the air with fists and legs, were Art Kellet and five of his men, held firmly by the strong arms of several of Willie's cohorts.

Brushing through the heavy moss, Conavan faced Willie and Art Kellet and his men.

"Let them go, Willie," he said. "They are friends."

Kellet whirled to Conavan as he was released.

"We don't need any help from you, you dirty-dealing doublecrosser!" he exclaimed. "What's your game this time?"

CONAVAN knew it would be useless to argue with Kellet; so he spoke up instead.

"You love Alice Orm, don't you?" he asked quietly.

"Why, er—yes." Kellet was flabbergasted for a moment, then he bristled. "What's that got to do—"

"Then do what I tell you and there is a chance that we can save her," interrupted Conavan, "and also stop Shag Gorrell from slaughtering the kackins in this valley. Alice told me herself they were extremely valuable to her. That ought to be enough for you."

Conavan waved his hand at Willie and the watchful creatures behind him.

"These animals are extremely intelligent. They can understand what you say. Let them lead you, but coöperate with them, and there is the possiblity that we can stop Shag Gorrell."

Kellet looked at Willie.

"Are you Willie?" he asked with a peculiar dubious tone.

Willie grinned all over his ugly face. Abruptly Art Kellet turned to Conavan.

"I think you're on the square," he said. "At least I'm sure Willie is. Alice told me about him . . . I'm with you."

An hour later, coming over the top of a steep, moss-covered hill, Art Kellet let out a surprised exclamation and pointed in the direction of the valley below. Conavan saw a sight which made him automatically grab his gun.

In the valley below, at least fifty kackins were charging forward. But not toward Conavan and his party.

On a small plateau, barricaded behind a rock embankment, were about twenty of Shag Gorrell's men. And most fantantastic of all, leading the kackins were several of Willie's queer people!

Frantically Art Kellet looked through his binoculars in search of Alice Orm. Slowly, hesitatingly, he lowered the glasses.

"Neither she nor Shag Gorrell is there—" He stopped.

Conavan saw him tremble slightly. Taking the glasses, Conavan watched the kackins rush forward. Under their queer leaders, these savage living fighting machines would prove truly formidable foes. They could have been sniped and slaughtered, attacking one by one, but under leadership and acting en masse—that was another story.

Rapidly the animals advanced, taking advantage of every bit of cover. They looked like a herd of giant long-legged crabs surrounding a cornered turtle. They approached in an encircling formation and completely surrounded the men on the plateau. Occasionally one would teeter and topple forward, hit by a bullet. But the others marched on, relentlessly.

The kackins aimed their deadly blowguns and shot stupefying stingers at the men. Fully half of Gorrell's men slumped down. Then the terrible monsters left cover and charged. Forward and up the escarpment they rushed, overwhelming the defenders. Their

huge claws crushed the soft bones of Gorrell's men. In ten seconds it was all over.

Beside Conavan, Willie jumped up and down and clicked in glee. Art Kellet glanced at Conavan, his face pale.

Death at its best is not pleasant to witness, but this was ghastly. Nonetheless, Conavan felt relieved. The kackins were safe now, because Shag Gorrell could not possibly destroy the rest alone.

But where was Shag Gorrell and where was Alice Orm?

CONAVAN turned to Willie.

"Willie," he said earnestly, "we've got to find Alice Orm, do you understand?"

Willie looked at him. Then he turned, clicked instructions at his companions, pointed at Kellet and his men, pointed toward the thin cleft in the valley wall that was Micro Pass, and waited.

Conavan turned to Kellet. "Looks like he wants you to go with the rest to the pass and mount guard."

Kellet nodded. "Not the worst idea on Io," he said. "Gorrell could escape in no other way. And he'll have to come back that way. There's nothing to eat in the valley except moss, and he'll try to escape once he finds himself alone, with hundreds of these creatures looking for his hide."

Further discussion was ended by Willie himself. He made a peremptory gesture to Kellet, grabbed Conavan by the arm and half led, half dragged him toward the bloody battleground where Gorrell's men lay dead.

"We'd better follow Willie's suggestions," shouted Conavan over his shoulder. "Up to now, he's been right. And besides, it doesn't look like we can do much else."

He saw Kellet wheel and trudge off in the wake of Willie's compatriots. Then he himself came to a halt at the last stand of Gorrell's men. Willie was sniffing the ground all about, ignoring the corpses. Conavan shuddered at the carnage, and waited. Willie stared toward the east, then clicked once at Conavan, and set off at a brisk pace that Conavan found needed real endurance to match. But he set his lips in a tight grin and followed.

"No ugly-faced monkey like this is going to leave me behind," Conavan muttered to himself. But for several miles he had all he could do to make good his self-promise. Then abruptly, just as Conavan's face had lost even its tight grin, Willie stopped.

He sniffed, bore off to the right, broke into a run. He plunged through a wall of moss and disappeared. And from beyond, to Conavan's horror, came the scream of a steam bullet, a crashing of jungle growths, a half-human gasp, and the thud of a falling body.

"Willie!" gasped Conavan, bursting through the moss.

There, in a tiny clearing, stood Jori Mutusi, his face a mask of insane hatred, his gun still smoking. At the edge of the jungle lay Willie's body, still twitching. A ghastly hole in his breast still emitted steam from the steam bullet imbedded in it. And in the center of the clearing, tied to a huge club-fern was Alice Orm, her clothing torn and stained as though she had been through a furious struggle in the moss. At her feet lay Shag Gorrell, dead with a steam bullet in his brain.

Mutusi whirled toward the sound of Conavan's entry into the scene and his gun, ready in his hand, whipped up. But not quite soon enough to match the incredibly fast draw of Quirk Conavan.

Alice Orm screamed. But the sound of the scream was still keening on the trembling atmosphere as the sharp

phizzzz of a steam bullet punctuated it, merging almost simultaneously with another. There was a thunderous explosion as a steam bullet buried itself in a wet fern-bole behind Conavan, and a cloud of vapor burst about him. Conavan flung himself aside, his gun whipping up once more for a snapshot from the waist, but he didn't fire it.

Jori Mutusi, fastest shot on all Io, was sagging slowly at the knees, his middle oozing steam. Oddly like a slow-motion movie he slumped down, folding gently to the soft moss, his face a ghastly mask of surprise and death. His gun was still in his hand, where it had been when Quirk Conavan went into action.

"That," said Conavan quietly, "was pretty fair shooting, if you don't mind me doing a little bragging, Miss Orm."

Then abruptly, shoving his gun back into its holster, he leaped forward. Alice Orm had fainted. And for ten minutes Quirk Conavan, interplanetary agent extraordinary, didn't know what to do—and did it.

"AT least you could have rubbed my wrists," said Alice Orm later, as they made their way slowly toward Micro Pass, Conavan lending a helping hand to the girl as she walked rather weakly after her ordeal. "Letting a girl lie there in a dead faint while you stand and wring your hands!"

Conavan grinned shamefacedly. "I wasn't wringing my hands. I was just looking—and it was rather nice . . ."

She glanced at him, then broke into a smile.

"You are human, after all," she said. "I knew you couldn't be completely a lone wolf who likes to traipse around the solar system bringing law and order to places like this. Why don't you look for a nice girl and marry her?"

"By the way," said Conavan hurriedly, "I haven't got it clear yet, what all these animals in the valley mean to you."

She looked at him. Then her smile broadened.

"All right, fighting man," she teased. "Change the subject if you wish. And I think you deserve an explanation. I didn't tell you much when we first met, did I?"

"I should say not!"

"Well," she began, "the monster I saved you from, the kackin, is not really a complete animal . . ."

"Not complete—what kind of crazy talk is that?" Conavan frowned at her.

"It's true," she insisted. "Evolution did something very odd, and very efficient, here in Lost Valley. The kackin, the cowkin and the telkin are all part of just one original animal."

"Telkin?" interrupted Conavan.

Her voice sobered. "Willie," she said.

"Oh."

"Originally the animal was a huge thing, but life on Io is arduous, and the Red Spot of Jupiter cut down living creatures through the ages. The animal was carnivorous, and catching its prey became too difficult. So, the fighting part of the animal, the kackin, detached itself and became a highly specialized hunter. It hunted food, brought the carcass back to the cowkin, which is simply a huge mouth, digestive organ and udder. The cowkin secretes a concentrated serum which is the food of both the kackin and the telkin. Thus, each part of the animal does its own particular job, and we have coöperation of the highest order."

"What does the telkin do?" asked Conavan.

"The telkin is the brains of the family. He lives the life of Riley. He goes off by himself, enjoys himself, and lets his two more ignorant members sup-

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Of the various tricks which a dog can be taught to do probably one of the most interesting is teaching him to count. John H. Klok, outstanding dog trainer, shows exactly how you can teach your dog, regardless of size, breed, or age, to count to 2, 3, 4, and 5, and this in any rotation! If you follow the simple instructions patiently and persistently from five to ten minutes twice a day, within a month your dog will be a good counter.

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Old Wary was great in size, strength, courage, ferocity, and ingenuity! Developing from a landless wanderer, warring for his own stomach, into an organizer and leader, and then into an autocrat who forced others to work for him. *Old Wary* seemed to know and enjoy the fear he had excited. Read how this monster of a dog ruled his gang with an' iron jaw . . . how this daring canine thief and his band of cunning servitors terrorized Chicago for years; prowled deserted streets at night in search of meat; robbed henroosts; plundered refrigerators of beef and milk; slew purebred dogs; chased cats for diversion! A true story by H. S. Canfield!

Don't miss these and the many other great articles about pets of all kinds in the big

SEPTEMBER ISSUE

formerly POPULAR PETS

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port him. He lives in luxury such as no other living creature ever has attained. He is the perfect 'visiting brother-in-law'."

Conavan gasped. "No wonder he was anxious to preserve the set-up! But what about you, and the cowkin milk?"

"That is my life work," she said more soberly. "Poor Dad innocently brought ergtern to Mars, and being half Martian himself, he never forgave himself for the plague he visited on his people. So, when he discovered that the hormone contained in cowkin milk was the antidote, he dedicated his life to extracting it and shipping it to Mars."

Conavan nodded thoughtfully. "Looks like I can do one more job when I get back to Trinidal," he said.

"And that?"

"Send out a crew of scientists to develop that serum and this valley, and wipe the plague out."

She turned to him, her eyes shining. "Oh," she gasped. "*Could* you?"

He shrugged. "The boys back home rather cotton to my suggestions after I've done the groundwork on a job. But say, do you know, I've just thought of something . . ."

"What?"

"Those kackins—that's what I am. I do the fighting."

Alice Orm suddenly threw her arms around him and kissed his lips. When she drew away, she was laughing.

"That," she said, "was 'thanks'."

"Get along," said Conavan brusquely, giving the girl a gentle push in the direction of Micro Pass. "A guy by the name of Art Kellet is waiting for you, and besides, I've got work to do—gotta fix up that space ship of mine and get back to Trinidal."

His face lit up. "Hope the boys have something nice cooked up for me! Things have been pretty dull lately."

THE END

Meet the Authors

JACK WEST — Author of TRAPPED ON IO

MY first taste of writing came when my older brother suggested sarcastically that I try writing for the *Medical Journal*. I caught the idea and got my first case of whooping cough by reading an article about it.

This so impressed me that I started writing a long series of "how to do it" articles—how to make love—how to make fudge, how to make merry. There were, I should say, over one thousand of these written under my name. If I recall correctly, one of them was published, to my brother's embarrassment.

I became bored with writing and started looking around for something more interesting to do. I took up outboard racing and won five championships in six years. Fickle boy that I was, I quit racing and took up college. This lasted until I got my degree four years later. Having received my degree in business administration, I figured the best job would be to start at the bottom and become president of General Motors in five or six years.

JACK WEST

After a couple of years of starting at the bottom, I retired and toured the country to look at some scenery and talk to a lot of people as a roving correspondent for *The Local Item*. While in the South I made a horrible mistake and wrote an extensive article on the TVA. I was not the least bit nice about the things I said about the gentlemen running the ole dams.

I don't know whether it was good or bad, but a university professor read my article and decided that I must be a genius of some kind. He persuaded the university authorities to grant me a scholarship and then found out what kind of a genius I was. By that time it was too late and I had another degree to my credit.

Because I couldn't face a third degree, I took to reading science fiction magazines in my spare time. At the same time I was a sports reporter for a press association and my editor began to complain about rocket ships in my baseball accounts. One day he roared,

"It's all right for you to say, 'the ball shot from his bat like a rocket,' but I can't stand this item about Dizzy Dean being sold to the Martians. Evidently your mind isn't on your work!"

Following this profound observation by my editor, I decided to try a science fiction story. Much to my surprise I sold my story. This made me terribly hi-hat; so much so that I told my editor that from now on I was a hi-salary guy. He agreed with me and paid me two weeks salary right away to prove it.

Since I've been writing, I've completed about 200 stories. Now, let's see, how many have I sold? Quite a few, I know. A fellow's got to sell a lot if he writes a lot. A lot of work writing those stories. I think, I'm not sure of course, but I think I've sold at least two science fiction stories.

Seriously, however, I write under several pen names and my specialty is articles. This month will see my name in at least five publications of national distribution. Some of the articles are technical, some are just plain interesting, some are about business, some economics, and one about golf.

I have been editor of five publications during my brief career. And although I'm only 27, your editor politely notices that I have much gray hair. At present I am on the staff of a well-known business magazine and I'm associate editor for two technical trade journals.

Who am I? (With apologies to the current Firestone advertising campaign) – *Jack West, Chicago, Illinois.*

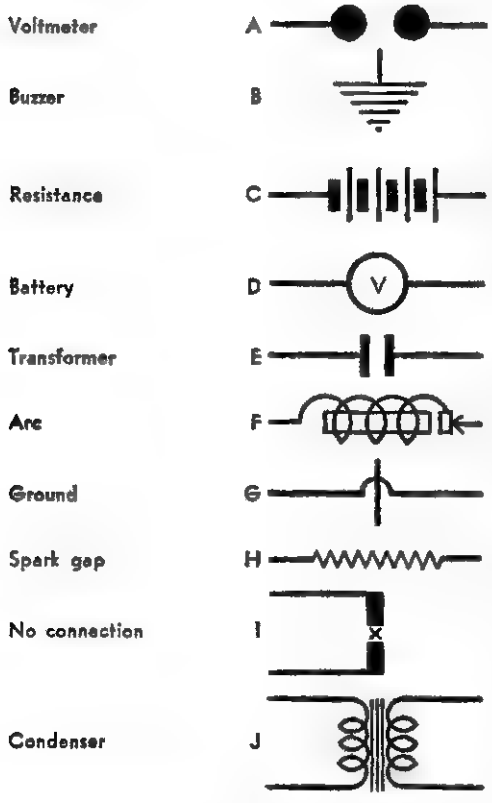
(Editor's note: Mr. West wrote his first story for us in the April issue of AMAZING STORIES, *entitled "When the Ice Terror Came," and was probably the first science fiction writer to kill Adolf Hitler. This present story is his second in our pages, and we hope you will like the character that he has created for us.)*

Science Quiz

The following quiz has been prepared as a pleasant means of testing your knowledge of things scientific and pseudo-scientific. We offer it solely for the pleasure it gives you and with the hope that it will provide you with many bits of information that will help you to enjoy the stories in this magazine. If you rate 50% correct in your answers, you are considerably ahead of the average. Give yourself 2 points for each correct answer.

SYMBOLS MATCH

Match the following jumbled electronic symbols with their names.



SCIENCE-FICTION QUIZ

1. Which of the following science-fiction editors have had a story published in AMAZING STORIES: (a) Raymond A. Palmer, (b) Hugo Gernsback, (c) F. Orlin Tremaine, (d) Mortimer Algernon Weisinger, (e) T. O'Conor Sloane, (f) John W. Campbell, Jr., (g) David Vern.

2. Who are the creators of the following scientific detectives: (a) Dr. Bird, (b) Taine of San Francisco, (c) John Hale, (d) Brutus Lloyd, (e) Luther Trant.

3. Many authors work in collaboration. Match the authors in the left-hand column with their collaborators in the right-hand column.

(1) Edwin Balmer	( ) Arthur K. Barnes
(2) Miles J. Breuer	( ) Arthur L. Zagat
(3) Austin Hall	( ) Ralph Milne Farley
(4) Irvin Lester	( ) Philip Wylie
(5) David H. Keller	( ) Homer Eon Flint
(6) Henry Kuttner	( ) Jack Williamson
(7) Nat Schachner	( ) David Lasser
(8) Stanley G. Weinbaum	( ) Fletcher Pratt

4. What are the first names of the following women science-fiction authors: (a) Moore, (b) Stone, (c) Lorraine, (d) Weinbaum, (e) Garfield.

5. The following titles have won an AMAZING STORIES bonus for being the best story in the issue in which they appeared. Name their authors: (a) "World Without Women," (b) "World Without Death," (c) "When the Moon Died," (d) "The Priestess Who Rebelled," (e) "The 4-Sided Triangle," (f) "Where Is Roger Davis?"

WEIGHTS AND MEASURES

Fill in the Missing Numbers:

A....gills=1 pint	E....pecks=1 bushel
B....pints=1 quart	F....bushels=1 quarter
C....quarts=1 gallon	G....quarters=1 load
D....gallons=1 peck	H....loads=1 last

THEORY SELECTION TEST

Can you select the correct laws and theories from among the following?

1. In every action between two bodies, the momentum gained by the one is double to that lost by the other.
2. Like magnetic poles attract and unlike magnetic poles repel each other.
3. When work is transformed into heat, or heat into work, the quantity of work is mechanically equal to the quantity of heat.
4. Concerning light rays: The polarizing angle is the angle of incidence for which the reflected and the refracted rays are at right angles.
5. The velocity attained by a falling body is proportional to the time of falling.
6. Matter can be created or destroyed, and can be changed from one form to another.
7. The composition of a chemical compound never varies.

(Answers on page 142)

QUESTIONS and ANSWERS

This department will be conducted each month as a source of information for our readers. Address your letters to Question and Answer Department. AMAZING STORIES, 608 S. Dearborn St., Chicago, Ill.

Q. Is it true that cement roads can be made by mixing a new kind of cement with common dirt?—Alex Small, St. Louis, Mo.

A. Yes, there is a new kind of cement developed by the Portland Cement Association which can be mixed with soil to form cement. Say that a dirt country road is to be converted into a cement highway; the dirt is analyzed by experts and a grade of cement to match that dirt is ordered. Next the road is plowed, harrowed, and then rolled with a sheep's foot roller. Cement is added and mixed with the road and rolled again. The completed highway is kept moist for seven days and then opened to traffic.

Soil cement has been tested on roads all over the United States. Although not as durable as regular cement, it is ideal for side roads, hangar aprons and floors, and for the quick construction of military highways and airports.

* * *

Q. How did deaths from flu compare in number with those of the World War?—Sid Gregg, Davenport, Iowa.

A. The flu epidemic of 1917-1919 took a toll of life of not less than 25,000,000 persons, more than four times as many as the battle deaths of the World War.

* * *

Q. Why do the gold and silver coins of the United States have milled edges?—Merton Hintz, Milwaukee, Wis.

A. The edges of coins are milled because this method makes it easy to detect any loss in weight due to wear or scraping of the edges by coin chiselers.

* * *

Q. Why is it that a radio will not work as well during the day as at night?—Conrad Tripps, Miami, Fla.

A. No definite information is at hand concerning this curious phenomenon, but it seems that light waves affect the stratosphere which is really the "wall" off which radio waves bounce to their destination. To further bear out this theory, recent sun spots almost made reception an impossibility. On the other hand, a few years ago a solar eclipse gave reception conditions similar to those experienced at night. This seems to indicate that the rays of the sun are directly responsible for the efficiency of radio reception.

* * *

Q. Just what is meant by the Universe?—Phidias Smart, Evanston, Illinois.

A. The term Universe as it is commonly used refers to the entire world of stars and nebulae, not only visible to the naked eye but hundreds of thousands besides so distant that their existence is revealed only by the greatest telescopes and the most sensitive photographic plates. The term actually includes also our own solar system. Einstein believes that there is a limit to the Universe. He believes that space is curved and that if you would start out in a rocket ship and travel in a straight line, you would end up at your starting point.

* * *

Q. What term is used to describe a person who sunburns but does not tan?—Munster Pratt, Gary, Indiana.

A. The term is heliophobe. One who sunburns repeatedly without acquiring a coat of tan comes in this category. Such a person should exercise care to avoid exposure to hot sunshine.

* * *

Q. What is the Mormon cricket?—Louis Samuels, Chicago, Illinois.

A. In 1848 a horde of crickets swept down on the Mormon settlement at Salt Lake City. These crickets came in such great numbers that they literally darkened the skies. Sweeping all vegetation before them, they threatened the extinction of the colony until a flight of gulls appeared from Salt Lake and exterminated the pest. In Salt Lake City a monument stands in memory of the work done by these gulls. It is interesting to note that this insect marches in large, orderly armies, but at times will leave good feeding ground for a comparatively barren area.

* * *

Q. How long have cross-word puzzles been in use?—Don Mackenzie, Long Island, N.Y.

A. It may surprise you to learn that the cross-word puzzle is far from a new idea. The Hindus and the Chinese as long ago as 1000 B.C. passed the time of day away with such a game. When the first white men arrived on this continent they found the American Indians playing some kind of criss-cross game with grains of corn. Furthermore magic squares played an important part in the occultism and mysticism of the Middle Ages. These seem to have been the forerunners of the cross-word puzzles of today.

* * *

Q. Is it true that synthetic rubber is of better quality than natural rubber?—Ellen Archer, Sioux Falls, S. D.

A. Yes. The new butadene and neoprene products, costing about 20c per pound, are superior in all respects to natural rubber. Various chemical treatments make them oil resisting.

DISCUSSIONS

AMAZING STORIES will publish in each issue a selection of letters from readers. Everybody is welcome to contribute. Bouquets and brickbats will have an equal chance. Inter-reader correspondence and controversy will be encouraged through this department. Get in with the gang and have your say.

ISSUE WAS TOPS

Sirs:

Congratulations are in order, I believe! Last issue of AMAZING STORIES was tops. I'm really glad to see the emphasis placed on interplanetary stories at last in your magazine. May you print many more of them.

This type story has been my favorite ever since I read the unforgettable "Skylark." But I think you will find it best to use stories with other themes as well. Interplanetary stories are good, but if you give them to us as a straight diet, they would become rather tiresome.

One comment re the science quiz. For some reason or other the last ones have been plenty easy for me. I scored 105 on the current one (and no help from reference books either). You seem to be emphasizing physics, chemistry and astronomy much more in them of late. That is about the only way I can explain my score. (I'm employed as a chemist with Eastman Kodak myself.)

Best story in the issue was Rocklynne's "The Mathematical Kid." Worst was Wilcox's yarn. Wilcox can do better. "Slave Raiders From Mercury" impressed me as being nothing but spine-chilling adventure. Idea stories hit the spot a lot better.

Repp gave me a real surprise. His "Planet of Black Terror" is one of the best yarns he's turned out in a long while. Generally I don't care much for him.

On the whole, the issue was the best one of recent months. Keep up the good work and let's go places.

FRED SENOUR,
210 Alameda St.,
Rochester, N. Y.

We don't intend to limit AMAZING STORIES *to interplanetary themes. Our interplanetary issue was special and will occur only once a year.—Ed.*

REACTIONS

Sirs:

First, a few reactions on your May issue:

"Giants Out of the Sun": Uninteresting style, shopworn setting; and how could that mirror affect any of the sun's rays except those which struck it? The giants were absurd in too many ways to itemize.

"Adam Link, Robot Detective": Binder is all right, but please change the record.

"Liline, the Moon Girl". Hamilton, even at his very worst, is still good reading. The science in this one is awful; the men actually surviving such an explosion . . . the breathable air not many hundred feet below a practically absolute vacuum . . . not to make much of the peculiar crucible and the air which that avid atomic blaze did not burn. Still, I vote for more stories by Hamilton—how about another about Juhl Din and his friends?

"Hok Draws the Bow": One of an extremely good series of stories. This one was marred by the apparent omission of a couple of pages of the manuscript—one on the editor. Of course Mr. Wellman's heroes were mighty men—they could sure cast those javelins!!! But a prairie fire in the springtime! Come out of it, Mr. Wellman! You're not on Mars, you know.

"John Brown's Body": A nice little story. Hardly germane to AMAZING though.

Now I've been rather hard on a couple of the authors, but the issue as a whole is about the level of preceding ones. Give us at least a couple of good interplanetary yarns each issue, please.

Just one reference to a story printed some time back, "The Strange Voyage of Dr. Penwing." Einstein reduced to absurdity!

So ye editor is as much in the dark about gravity as anyone. Well, I have a bug in my bonnet about that, but not enough higher mathematics to prove my point. But take a tip. When somebody says "curved space" or "expanding space," just yawn. They are only trying to explain away their lack of any conception of how "gravity" really works. And that takes in our ranking scientists.

GERALD MOORE,
331 S. Arthur Ave.,
Pocatello, Idaho.

We won't comment on your opinion since it speaks for itself. And as for Adam Link, we expect him to reappear in the near future with his most interesting adventure.—Ed.

ANSWERS A-PLENTY

Sirs:

Was exceedingly pleased with the answers to my weight problem, both as to the letter you printed written by Fred A. Senour, and to the miscellaneous letters I've received at my home.

Now I really have something to rave about!!! The last two covers, namely July and August, have been just to my liking. I prefer machines and space ships to bug-eyed monsters any day. That machine by Robert Fuqua is a real masterpiece!

Congratulations, and keep up the swell work.

FREDERICK WEINER,
Ambassador Apts.,
14 Buswell St.
Boston, Mass.

We got many answers to your letter, which we couldn't print, and we were as pleased as you. Our readers certainly help an editor out when he needs 'em!—Ed.

LIKED INTERPLANETARY ISSUE

Sirs:

The June issue of AMAZING STORIES is a great improvement over the May issue. The flashy cover first attracted me to the new issue. I hastily grabbed the copy up and bought it. I get each issue as soon as they come out.

I liked the idea of a special Interplanetary Issue, for interplanetary stories are my favorites, and all the stories were this type!

HARRY SCHMARJE,
318 Stewart Rd.,
Muscatine, Ia.

We are planning another sort of special issue in the near future, and we think you'll like it. There'll be more announcements in a few months.

Glad to see you liked the cover. We feel rather proud of our recent success with covers, and the readers have given us more palms than we know what to do with—unless it is to hand them to a mighty fine art staff.—Ed.

BRAVO FOR KRUPA

Sirs:

Bravo for Mr. Krupa on his back cover conception of "When Meteorites Crash." I like the way Henry Gade dramatizes a possible crash.

In my estimation the three best stories in the June AMAZING STORIES were: 1. "Slave Raiders from Mercury"; 2. "The Mathematical Kid"; 3. "Planet of Black Terror."

Don Wilcox writes swell stories, especially "When the Moon Died." Hope to see more of them.

How about more interplanetary issues? They're swell.

I have read the December and February issues of AIR ADVENTURES and like them very much, but where is the April issue? I've gone to my dealer every day for a month and no results. What's wrong?

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29x4.75-20	2.50	1.25
29x5.00-19	2.85	1.25
30x5.00-20	2.85	1.25
5.25-17	2.90	1.45
29x5.25-18	2.90	1.35
29x5.25-19	2.95	1.35
30x5.25-20	2.95	1.35
31x5.25-21	2.95	1.35
5.50-17	3.35	1.40
28x5.50-18	3.35	1.40
29x5.50-19	3.35	1.45
6.00-17	3.40	1.40
29x6.00-18	3.40	1.40
31x6.00-19	3.40	1.45
32x6.00-20	3.45	1.55
33x6.00-21	3.65	1.65
32x6.50-20	3.75	1.75
6.00-16	3.75	1.45

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but where's the back cover painting by Paul?

EDMUND MURMAN,
136 Shepherd Ave.,
Brooklyn, N. Y.

Mr. Krupa will continue to present back covers from time to time, ably assisted by Henry Gade and his dramatized articles. Mr. Krupa (to drop you an advance hint) is also doing a back cover for the AMAZING STORIES QUARTERLY which will hit the stands soon, carrying reprints of AMAZING STORIES of past months. The Quarterly is being issued as a means of popularizing science fiction still further by means of a commanding extra-large edition.

AIR ADVENTURES has been discontinued.

Paul's back covers have been switched to AMAZING STORIES because of ad contracts for FANTASTIC ADVENTURES.—Ed.

CALL YOUR BROKER—BUY AMAZING!

Sirs:

AMAZING STORIES' stock rises a point or two with the August number.

"Murder in the Time World" easily takes first place in spite of its atrocious title. A novel and comprehensible type of time-travel, plus a carefully worked out plot are in its favor.

There is little to choose between the rest, but Don Bern's very short story is a little the best of the group.

My favorite criticism of the magazine, "too much emphasis on love interest and violent action" still applies, but plots, characterization and science-content seem to be on the upgrade.

The cover is good, especially in color selection and subject matter.

D. B. THOMPSON,
3136 Q St.,
Lincoln, Nebr.

In plain words, Mr. Thompson, we are improving in at least four ways, according to your letter, and your only criticism is about a factor that we are frank to admit we ourselves consider still another improvement, love interest of a legitimate and purposeful kind, with plenty of human interest, and action, which is the spice of life. We all love adventure.

If you'll send us a title for "Murder in the Time World" as you think it should be, we'll be glad to publish it and get reader opinion on it. We thought it was very descriptive of the story.

Thanks for your praise. How do you like this issue?—Ed.

NOW IT'S ROSES!

Sirs:

Yours truly was truly surprised to see his brickbat letter peeking out of AMAZING. I was amazed to be sure. Therefore, old Konrad fires away again and this missile that speeds from my L. C. Smith is intended for the column—because I feel that I should change some of those brickbats around a bit. I admitted that I like the special space issue—now I admit that I really fell for the

next and though I haven't finished the last—it is great, so far. Yet I will not write about the August issue, until the other boys of our science fiction circle pore over it and give me their opinions.

A. R. Steber's story, "When the Gods Make War" was really and truly grand. It is the type of tale that we readers go for, you know, a simple love story set in a shattered future world. Well, you know what I mean—look at the acclaim given the Priestess stories.

"Secret of the Moon Treasure" was a stinger! None of the boys have any finger nails left after reading that puzzler. When they get that hot—more Ayre, please!

"Mirrors of Madness" was great! A slow novelistic story that held quite a few riddles and plenty of suspense.

"Monster Out of Space" was not a new plot, but Jameson handled it in such a way that we feel like putting it first. The characters were so strongly brought out that we feel like we knew them.

"A. Link, Champion Athlete"? Well, this was good, but—just between me and you and the gate post—don't you think that Adam, who has such a brilliant brain, is wasting his time fooling around with bowling and metal gals instead of working on science? There is space travel yet to be conquered and so sic A. Link after this problem and break up some of his moonlight walks! Metal gals, bah! Real ones are bad enough when it comes to science!

"The Ray of Hypnosis"—Okay!—But Mr. Kaletsky has got himself into a humor story rut and we intend to keep him right there. Lord knows! Humor is hard to work into fantasy and when we find a man who can do it (Kaletsky), we want him to stay put. Open vote in the club was 100% for Kaletsky to be given the title, Master of Science Humor Stories.

Therefore, in all fairness and in common justice—let me haul back those bricks and present you with a large bouquet of vari-colored spring flowers—still fresh with morning dew. Your last three issues really earned them.

KONRAD WM. MAXWELL,
45 E. Madison Ave.,
Opelousas, La.

Okay, okay! We print brickbats, and what happens, you take 'em back yourself! And we admit, you know what you're talking about. Because your rating of the stories in the July issue is no less than perfect, fella! That's the way they finished.—Ed.

WANTS PLENTY OF INTERPLANETARY STORIES

Sirs:

In the current issue of AMAZING STORIES I liked "Suicide Squadrons of Space" by David Wright O'Brien best. Second was "Lost Treasure of Mars" by Edmond Hamilton.

Interplanetary stuff is the most interesting ma-

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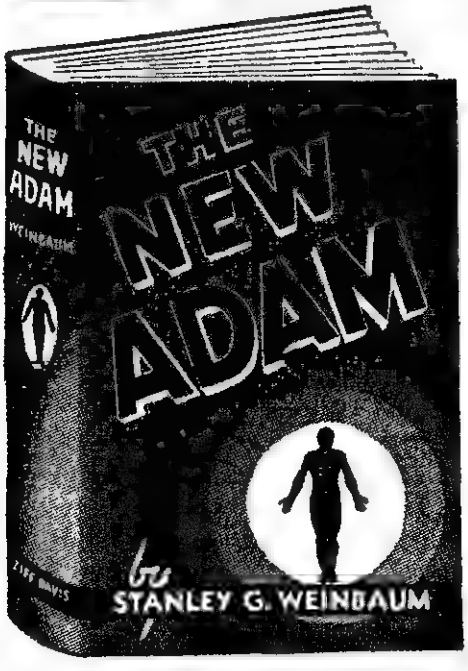
A SUPER STORY OF A SUPERMAN



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NAME

ADDRESS

CITY & STATE

terial of all, I think—so let's have plenty of it.

PHIL MCDANIELS,
925 Burbank,
Burbank, Calif.

You selected the two leading stories in the August issue, judging from our survey of letters received. The stories in the August issue rated as follows:

1. *Suicide Squadrons of Space*
2. *Lost Treasure of Mars*
3. *The Living Mist*
4. *Mystery of the Mind Machine*
5. *Murder in the Time World*
6. *The Incredible Theory of Dr. Penwing*
7. *The Man Who Knew All the Answers*

We will certainly continue our interplanetary stories.—Ed.

OLD RELIABLE

Sirs:

My hat's off to good old Edmond Hamilton for his "Lost Treasure of Mars," current issue of our magazine. The old reliables always dish out bell-ringers.

And, incidentally, let's have more serials about time travel, eh, Ed?

DAVID R. MASSIE,
5502½ Sierra Vista,
Los Angeles, Calif.

Time travel? Boy, have we got some swell time yarns coming up. Looks like each issue will give us more bell-ringers for you to take your hat off to!—Ed.

"BOY-OH-BOY! HOT DAWG!"

Sirs:

Having read your August issue of AMAZING STORIES, I am forced to admit that it was wonderful, swell, a knockout, etcetera. However, I think "The Man Who Knew All the Answers" is exactly where it belongs—at the bottom! A dud.

Your best story was "Suicide Squadrons of Space." Boy-oh-boy! Hot dawg!

Let's have more time tales like "Murder in the Time World." Which reminds me, in the illustration Tarig bears a distinct resemblance to Wallace Beery.

Dave Miller of Florida and I have agreed that there ought to be more fans below the age of 14. There really should. I suppose we ought to be satisfied when we read Mr. Wilhite's letter, but we aren't. We like 'em young but that's about 7 years too young.

I believe every fan agrees with me when I say: *WE WANT TRIMMED EDGES! ! ! ! ! !*

Now I know from experience that because of that sentence this letter will go swiftly to the waste basket. Ye Ed just doesn't like that combination. Tell us why, Ed.

JACK TOWNSEND,
Wilson, N. C.

There we go again. No brickbats this issue.

Unless we can dig 'em out of your letter, where they are buried beneath hot dawgs an' things.

Now, to answer your question—if we threw all the letters into the waste basket which ask for something we haven't given them in AMAZING STORIES, we'd throw a lot of them there. It seems everyone has a pet request. Trimmed edges is the pet of what we must admit is a minority element, in spite of their vociferous ability. Our personal dislikes have no effect on what letters we use. We just can't repeat the request over and over again, even though we do use letters from the same readers month after month in several instances. We have a few old faithfuls like yourself, who ask us regularly for trimmed edges. But honestly, it's the stories the readers want. We can't see where trimmed edges would help the magazine at all, outside of cutting down the size of our popular cover paintings still further.—Ed.

YOU'RE IN NOW!

Sirs:

Must congratulate you on August AMAZING STORIES. Best issue in a long time. Enjoyed every story!

Cover, magnificent! Better even than the June issue. How about a Paul cover? I enjoy Paul's back covers.

I wish you would print my letter. I write you each issue, as well as the other science fiction magazines (yes, I read your rival magazines). Never once have I seen my letter in print. Each magazine I buy, I first look in the letter department, but no, my letter's not there.

I can't kick on the August stories. They're all tops!

HARRY SCHMARJE,
318 Stewart Rd.,
Muscatine, Ia.

Howdya like that! Now he'll find his name in the column twice in one month. Well, letters float around this desk and eventually find their way into a column. We try to make a fair selection. And no doubt, a dozen of your fellow-readers will write, protesting of the "reign" of Harry Schmarje in this issue.—Ed.

SCIENTIFIC COVER

Sirs:

Since Ziff-Davis took AMAZING STORIES to the fold, there has not been one really scientific cover on the front of the magazine until this month of June.

Krupa's effort for "Trapped on Titan" has those subtle qualities of other-worldly atmosphere and strange beings without drifting into absurdity. The art is precise and the coloring is excellent, and the idea is taken from the story without the artist's additions of his own.

The rear cover by the same man is equally well made with but one mistake, that being that such an over-heated object would surely cause clouds of steam after plunging into the sea. Also, with-

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SEPTEMBER ISSUE

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out an atmosphere, the sky on Titan would be the blackness of space unless the radiations from the mineral deposits caused that golden glow. But these unessential technicalities do little to detract from the good work of Krupa. All should rejoice that AMAZING STORIES has another really good cover artist besides McCauley. Fuqua and the newcomers are getting better.

Don Wilcox is the best of your new authors, and his "Slave Raiders" does much to advance his prestige. It read to me rather like a new Coblentz. The illustrations were not quite true to the story; the second one off key completely. This story was number one on my list.

Glad to see the return of Pragnell and his amusing character. Poor Hargreaves always gets the tall gals that push him around. O'Brien's cover story fair, but old plot. Good writing saved it. Don't just know why, but this author sounds like dear old RAP to me. Would it be a pen name? Pic for this one pretty bad. Rocklynne and Gale stories fair, but too much emotional hysterics in both. The former has the edge, with its pic sharing first place with Jackson's illustration for the second-best tale in the issue by Repp. Of course, the shapely and lightly clothed femme is an eye-catcher, but did it say she was so unprepared for the snowy weather definitely? I liked the way the hero solved the black moss affair.

CHARLES HIDLEY E5,
2541 Aqueduct Terrace,
New York City.

Wrong, Mr. Hidley. Krupa painted his cover, and then David Wright O'Brien wrote the story to fit. That is why the painting agrees perfectly with the story.

And O'Brien, who recently went to Hollywood on a job for Zanuck, an outgrowth of his work with AMAZING STORIES, would feel quite hurt to know that you doubt his existence. Incidentally, he is a nephew of the late Farnsworth Wright. —Ed.

ISOLATION!

Sirs:

To begin with, let me say I can scarcely give credence to the much-discussed "Giants Out of the Sun." Nevertheless, the possibilities recurred to me on reading the attached clipping in yesterday's Kansas City Journal. It demonstrates the *completeness* of isolation possible in Peru. You can take it from there.

However, credence or no, science fiction stories in general have their fascination in the fact that they *may* come true. And *have* been coming true ever since the days of Jules Verne. Some of the latest (as mentioned in AMAZING) have been the powerful, speedy, mechanized warfare methods, which up until now existed only in the pages of science fiction. The passing of the years shows more and more what the imagination of man can conceive, and his mind produce. Not today perhaps, nor tomorrow, nor next year; but sometime.

Mayhap our authors should be careful (as they usually are!) about giving too many details of their secret weapons—lest some wild-eyed dictator, with the usual world-rule-phobia, put one together and find it works.

W. W. FOXWORTHY,
225 N. Webster,
Erie, Kan.

The clipping Mr. Foxworthy submitted told of a lost town in Peru which had been out of contact with civilization for 25 years, and not only did not know that Hitler had begun a new war, but that the first world war had ended.—Ed.

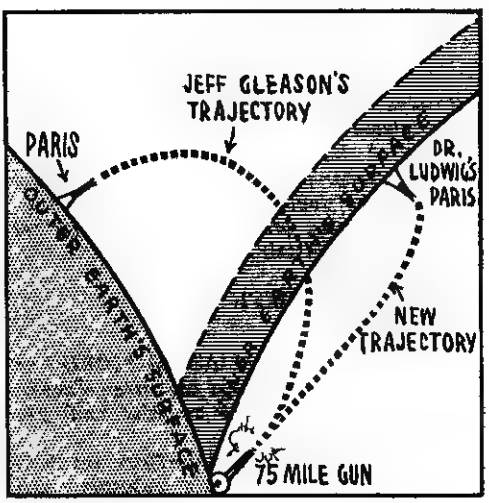
OKAY, WHY NOT?

Sirs:

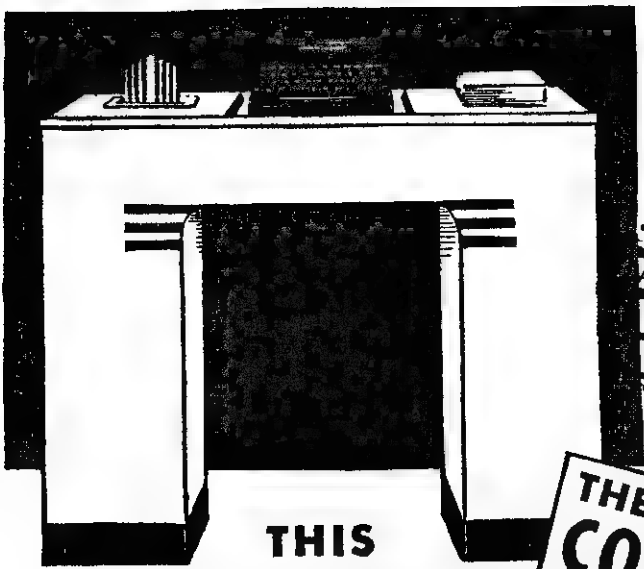
In the first paragraph of the Observatory in the August issue of AMAZING STORIES, you state that the readers proved Dr. Penwing's theory about the earth on the inside of a hollow ball, to be false.

I would like to refute Mr. Jeff Gleason's (of Los Angeles, California) letter with the enclosed sketch which is patterned after his. In his drawing, he gives the trajectory of the projectile as set to the earth's outer surface. But in drawing its direction for the inner surface, why not a new trajectory for the changed condition, as my drawing shows?

ABRAHAM RADDEN,
1541 55th St.,
Brooklyn, N. Y.



We reproduce here Mr. Radden's drawing, and we leave the inferences up to you. Apparently, Dr. Penwing has supporters for his theory, and with equally good logic to back him up. Now, is the earth on the inside of a sphere, or is it on the outside? We give up. Maybe it is.—Ed.



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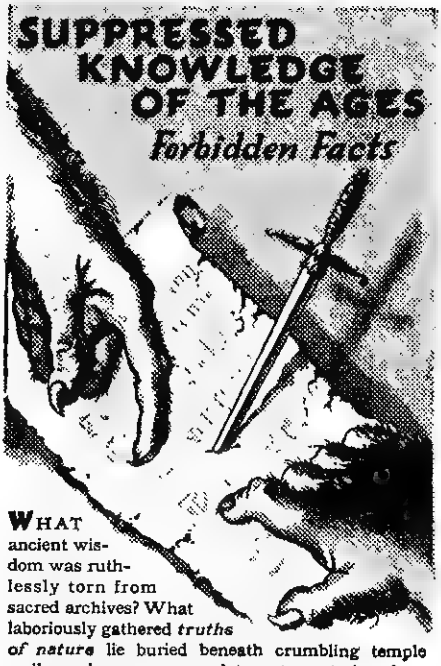

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QUIZ ANSWERS

(Quiz on page 132)

SYMBOLS MATCH

Spark Gap—A; Ground—B; Battery—C; Voltmeter—D; Condenser—E; Buzzer—F; No Connection—G; Resistance—H; Arc—I; Transformer—J.

SCIENCE-FICTION QUIZ

1. a, b, d, f, g.

2. (a) Capt S. P. Meek, (b) David H. Keller, (c) Ed Earl Repp, (d) Thornton Ayre, (e) Edwin Balmer and William MacHarg.

3. 6, 7, 8, 1, 3, 2, 5, 4.

4. (a) Catherine, (b) Leslie, (c) Lilith, (d) Helen, (e) Frances.

5. (a) Thornton Ayre, (b) Polton Cross, (c) Don Wilcox, (d) Nelson S. Bond, (e) William F. Temple, (f) David V. Reed.

WEIGHTS AND MEASURES

4; 2; 4; 2; 4; 8; 5; 2.

THEORY AND LAW SELECTION TEST

1. Wrong. 2. Wrong. 3. Correct. 4. Correct. 5. Correct. 6. Wrong. 7. Correct.

CORRESPONDENCE CORNER

Charles Richard Dutton, 17, Box 25, Bennock Road, Stillwater, Me., would like to correspond with those interested in nature. . . . Elgee Whipp, Box 335, Opelousas, La., is desirous of pen pals of the male sex between ages of 15 and 20. . . . Jerome Rabnett, 596—9th St., East, Owen Sound, Ontario, Canada, is interested in hearing from fans, and trading magazines; send lists. . . . Frederick Weiner, Ambassador Apts., 14 Buswell St., Boston, Mass., would like to obtain the address of a correspondent who signs "A Dumb Sailor," and who lives in Honolulu. . . . Wilbur J. Widmer, 6109 Park Ave., West New York, N.J., is willing to trade a practically new copy of Robert Baker's textbook, Astronomy, 1933 edition, for another textbook: mathematics, calculus, mineralogy, geology. . . . Robert McTyre, 202-09—43rd Ave., Bayside, N. Y., would like to hear from boys around 15 yrs. who are interested in fraternities, stf., etc. . . . Melvin Henriksen, 1385 Nelson Ave., Bronx, N. Y., is anxious to exchange "City of Peril" for "After Worlds Collide" or some other science fiction book. . . . Robert Mastell, 2611—6th Ave., E., Hibbing, Minn., is interested in corresponding with those interested in astronomy, philosophy, science fiction, world history and geography, checkers, postcards, and science in general; age 18. . . . Donald H. Luck, 17, Audley St., North Hobart, Tasmania, would like to exchange science fiction magazines, current and pre-1937, for mint stamps or postcards. . . . Antoine St. Jacques, 113 N. Charlotte, Ont., Canada; is desirous of correspondents who are stamp collectors, boy or girl about 16 yrs., and who will trade French Commemorative for American stamps. . . . Harry Schmarje, 318 Stewart Rd., Muscatine, Ia., has for sale fan and science fiction magazines. . . . The Swap Shop, Box 141, Velva, N. D., will sell entire stock of science fiction magazines and books at half price; will also consider swapping books, magazines, or other merchandise. . . . Ben Luna, Jr., 401 E. Mobile St., Florence, Ala., has for sale various detective, aviation and science fiction magazines; prices: 3c to 25c; send for list. . . . C. S. Johnstone, 1115 W. Front St., Plainfield, N. J., has approximately 300 science fiction magazines dating from 1927, which he wishes to dispose of. . . . Pat Murphy, Box 275, Lake City, Fla., is 14 yrs. of age and will reply to all communications from fans between 12 and 15. . . .

KERRIGAN WAGES A COPRA WAR

KERRIGAN'S revolver smacked down . . . Deagan never knew what struck him. Blood gushed from his scalp, and from his cheek where the front sight slashed in passing. He staggered, mumbled, flopped face down in the brush!

Beautiful Malia was too surprised to move or speak. She stood there, her shapely native body outlined by the gleam of the palm oil on her skin.

Kerrigan caught her arm. "Not a word! Get Nito away as quickly as you can. No telling what'll happen when Weaver finds out!"

Jim Kerrigan pointed, and told Malia where his canoe was hidden. "Wait for me there. I have some *business* with these fellows!"

What fate awaited Kerrigan as he sought square-faced, square-shouldered Weaver; swarthy, horse-faced Laporte; and stocky, bullet-headed Schwartz?

Don't miss *Kerrigan Wages a Copra War* by E. Hoffmann Price . . . one of the six exciting tales you'll thoroughly enjoy in *South Sea Stories* for October!

Read how two-fisted Jim Kerrigan was robbed, drugged and stranded in Papeete; how he met and fell in love with adorable Lili Dupre; how his boldness and vigor landed him a job as a superviser of a coconut plantation on Taka-Taka Island!

Here is a gripping story that's guaranteed to thrill you from beginning to end . . . so go to your nearest newsstand now and be among the first to read this and the other tales brimming with intriguing action and romance of the South Seas!

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☆ **MORUA FIGHTS FOR LOVE—by William O'Sullivan** Muriel May had wealth in her lovely hands . . . and then the Oceania hit a derelict and went to the bottom. Marooned on Okeola, the problem of landing a man became more complicated when Morua, island girl, brought her pagan beauty into play.

☆ **MYSTERY ON DEAD MAN REEF—by George Armin Shaftel.** John Gregg landed on Puna-Puka under false colors. Then when danger came, he found himself forced to admit he was a thief and forfeited his claim to reliability. He couldn't save the life of the only man who could prove his innocence.

☆ **TREACHERY ON CAMOIA—by Alfred Bester.** Johnny Maverick waited three years to make good, so that he could marry the girl he left behind. Then she came to the same island, and his best friend turned traitor, to steal his business and his girl! But someone else was treacherous too . . . his own girl!!!

Plus—MANY OUTSTANDING FEATURES AND ARTICLES—All in the BIG

OCTOBER ISSUE

South Sea STORIES

AT ALL NEWSSTANDS AUGUST 20 — Be sure to get your copy!

LIFE ON GANYMEDE

By HENRY GADE

Pictured on our back cover this month is a hypothetical conception of life on Ganymede, moon of Jupiter, as our artist imagines it

GANYMEDE is the largest of the Jupiterian satellites. It is 3,273 miles in diameter, which makes it slightly larger than our own moon. It is the fourth most distant satellite of Jupiter, being 664,200 miles away from its parent body. It has an eccentricity of orbit of 0.0015, and its inclination of orbit to the planet's orbit is 3 degrees 2.3 minutes. Its sidereal period is 7 days, 3 hours, 42 minutes, 33.35 seconds.

Definite observation has proved that Ganymede presents, like Earth's moon, only one side to its parent, making one revolution on its axis, to one revolution around Jupiter.

Surface markings have been observed and photographed, which reveal the existence of both sea and land areas, if differences in shading can be said to indicate them. The possibility of an atmosphere existing is also quite likely, and recent ultra-violet, infra-red photographs have shown differences in diametric measurement which indicate a gaseous envelope.

The gravity of the satellite is about one quarter that of Earth, and an Earthman could jump about twenty-two feet into the air.

Apparently a warm climate is indicated, since no polar caps have been observed. It is possible that the temperature range is somewhere near an average fifty degrees.

Let us assume that we have landed on Ganymede in our space ship. We step out, with the aid of weighted shoes to preserve our balance, and clad in a space suit. Cautiously we remove our helmet, to sample the air. It proves to be fairly cool and sweet, and pure.

Walking slowly, to avoid falls in the light gravity, we walk over a terrain much like Earth, with soil and rock formations. There are few hills, and not many mountains. The few that do exist are probably not volcanic in origin.

In the distance we see a low range of purple cliffs, formed of crystal. And at their foot, and topping their peaks are structures that look man-made. We advance toward them

As we approach, we see that it is a strange system of community dwellings. There are no individual houses, but rather, dome-shaped dormitories. They are probably built of clay and fibre, moulded and baked to light, brittle hardness suitable to construction in a light-gravity world.

Figures appear, mount lizard like animals, and ride toward us. We raise our hand in a gesture of friendship, because we see that the riders have sharp barbed spears held at the ready.

We gasp as they come nearer, and see that they are not humans, although as close to human form as almost any other living being in the solar system, but giant felines, golden cats, beautifully furred and clad only in light breechclouts.

They surround us and stare menacingly, but they do not offer to harm us. They watch us as a cat watches a mouse, or a dog—wary, ready for any eventuality.

They have slant eyes, green and beautiful. Their ears are sharp and pointed, and their nose small and flat. Their lips are vivid red, and teeth white and pointed.

The ones who have advanced to meet us are female, and we learn that the female is the dominant species on Ganymede. We are forced to concede that we admire their grace, their arrogance, and their beauty of form and fur.

Their language is a strange and musical combination of mewing and purring. They are extremely curious and they inspect us thoroughly.

We find them eventually friendly, and we suspect that they can be very affectionate, as cats are on Earth, and also aristocratically independent at an instant's whim. But we also feel that they are dangerous. As dangerous as a creature both cat and woman should be. We decide not to stay long.

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- **SPECIAL AGENT TO VENUS**—by **Thornton Ayre.** The whole solar system was engaged in war, and Venus held the whip hand. The Earth expeditionary forces in Venus jungles were dying like rats in a trap . . . and to one man was entrusted their fate. . . If he could get through the space forts that ringed the planet like a vast floating Maginot line!
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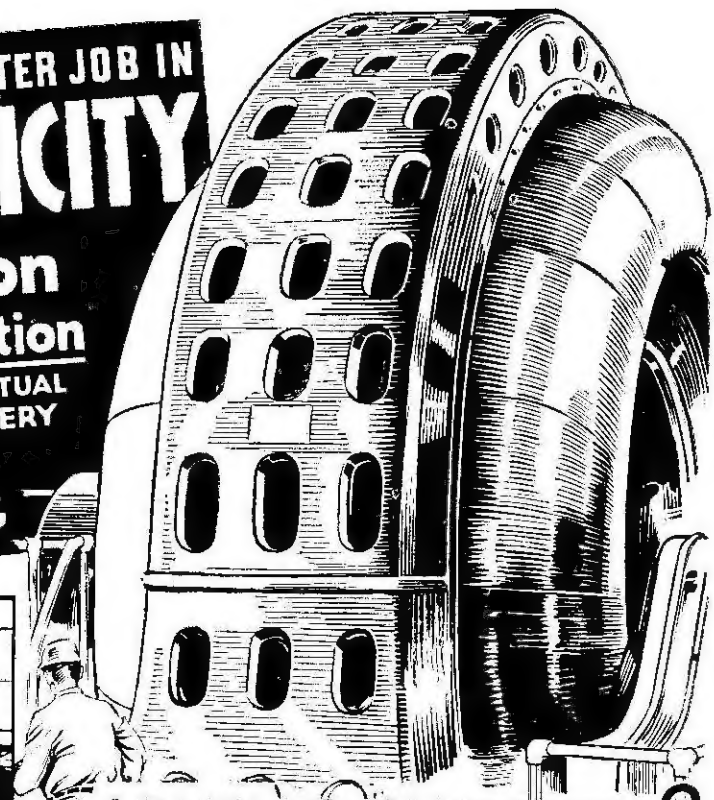

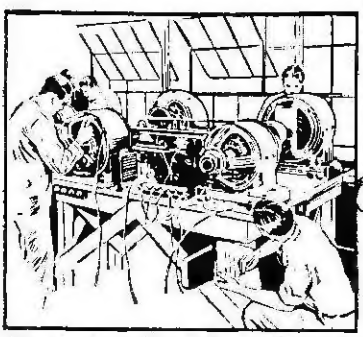

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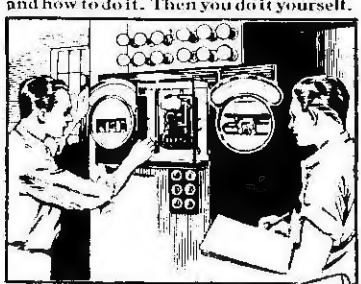

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